(November 16, 2001 Draft)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SANTA ANA REGION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

AND

WASTE DISCHARGE REQUIREMENTS

NPDES NO. CAS618036

ORDER NO. 01-16

FOR

THE SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS, THE COUNTY OF SAN BERNARDINO, AND THE INCORPORATED CITIES OF SAN BERNARDINO COUNTY WITHIN THE SANTA ANA REGION

AREA-WIDE URBAN STORM WATER RUNOFF

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), finds that:

1. The 1987 amendments to the Clean Water Act (CWA) added Section 402(p) that establishes a framework for regulating municipal and industrial (including construction) storm water discharges under the National Pollutant Discharge Elimination System (NPDES) permit. Section 402(p) of the CWA requires NPDES permits for storm water discharges from municipal separate storm sewer systems (MS4) as well as other designated storm water discharges that are considered significant contributors of pollutants to waters of the United States. On November 16, 1990, the United States Environmental Protection Agency (hereinafter EPA) published Phase I regulations (40 CFR Parts 122, 123 and 124) which describe permit application requirements for storm water discharges.

2. Prior to EPA's promulgation of the Phase I storm water regulations, the three counties (Orange, Riverside, and San Bernardino) and the incorporated cities within the jurisdiction of the Santa Ana Regional Board requested areawide NPDES permits for urban storm water runoff. On October 19, 1990, the Regional Board adopted Order No. 90-136 for urban storm water runoff from urban areas in San Bernardino County within the Santa Ana Region. The San Bernardino County Transportation/Flood Control Department (SBCFCD) was named as the principal permittee and San Bernardino County and the incorporated cities were named as the co-permittees. Order No 96-32, issued by the Regional Board on March 8, 1996, renewed the permit for another five years.

3. Order No. 96-32 expired on March 1, 2001. On September 1, 2000, the San Bernardino County Department of Public Works, in cooperation with the County of San Bernardino, and the incorporated cities of Big Bear Lake, Chino, Chino

Hills, Colton, Fontana, Grand Terrace, Highland, Loma Linda, Montclair, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Upland, and Yucaipa (hereinafter collectively referred to as "permittees" or dischargers) jointly submitted National Pollutant Discharge Elimination System (NPDES) Application No. CAS618036 and a Report of Waste Discharge for reissuance of their area-wide storm water permit for urban storm water runoff. The Report of Waste Discharge was submitted in accordance with Section V.29 of the previous NPDES permit (Order No. 96-32) as application for permit renewal. In order to more effectively carry out the requirements of this order, the permittees agreed that the San Bernardino County Flood Control District (SBCFCD) would continue as the Principal Permittee and San Bernardino County and the incorporated cities would be co-permittees. On March 2, 2001, Order No. 96-32, NPDES No. CAS618036, was administratively extended in accordance with 40 CFR Part 122.6 and Title 23, Division 3, Chapter 9, §2235.4 of the California Code of Regulations.

4. Within the Santa Ana Region, the permittees serve a population of approximately 1.33 million, occupying an area of approximately 985 square miles. The latest figures obtained from the Reconnaissance Progress Report estimated 384 miles of above-ground and 334 miles of below-ground storm drain channels in the project area. Approximately seven percent (7%) of the San Bernardino County area drains into water bodies within this Regional Board's jurisdiction. The project area is shown on Attachment 1. Approximately 50% of the remaining San Bernardino County drainage areas are within the jurisdiction of the Lahontan Regional Board and the other 43% is within the jurisdiction of the Colorado River Basin Regional Board. However, urbanization in those areas is minimal compared to areas within the Santa Ana Regional Board's jurisdiction.

5. Runoff from the San Bernardino County drainage areas is generally conveyed to the Riverside County drainage areas through the Santa Ana River or other drainage channels tributary to the Santa Ana River. These flows are then discharged to Reach 2 of the Santa Ana River through Prado Basin (Reach 3 of the Santa Ana River). Most of the flow in Reach 2 is recharged in Orange County. During wet weather, some of the flow is discharged to the Pacific Ocean through Reach 1 of the Santa Ana River.

6. The Santa Ana River Basin is the major watershed within this Region. This watershed is divided into the lower Santa Ana River, middle Santa Ana River, Chino basin, upper Santa Ana and Big Bear Lake watersheds. The lower Santa Ana River Basin (downstream from Prado Dam) includes the Orange County drainage areas, and the rest of the Santa Ana River Basin includes the San Bernardino County and the Riverside County drainage areas. The San Bernardino County drainage areas are generally upstream of the Riverside County drainage areas. Some of the main surface water bodies in San Bernardino County within areas regulated under this order include:

    a) Santa Ana River, Reaches 4, 5, and 6,

b) Cucamonga Creek,

c) San Sevaine Channel,

d) Lytle Creek,

e) San Timoteo Creek,

f) Bear Creek,

g) Mill Creek (in San Bernardino area).

Surface water bodies in San Bernardino County within the jurisdiction of Santa Ana Region are listed in Attachment 2.

7. The beneficial uses of these water bodies include municipal and domestic supply, agricultural supply, industrial service supply, groundwater recharge, hydropower generation, water contact recreation, non-contact water recreation, and sportfishing, warm freshwater habitat, cold freshwater habitat, preservation of biological habitats of special significance, wildlife habitat and preservation of rare, threatened or endangered species. The ultimate goal of this storm water management program is to protect the beneficial uses of the receiving waters.

8. The three county areas within this Region are regulated under three area-wide permits for urban storm water runoff. These area-wide NPDES permits are:

a) Orange County, NPDES No. CAS618030,

b) Riverside County, NPDES No. CAS618033, and

c) San Bernardino County, NPDES No. CAS618036.

For an effective watershed management program, coordination among the regulators, the municipal permittees, the public, and other entities is essential.

9. Studies conducted by the EPA, the states, flood control districts and other entities indicate the following major sources for urban storm water pollution nationwide:

a) Industrial sites where appropriate pollution control and best management practices (BMPs)[1] are not implemented;

b) Construction sites where erosion and siltation controls and BMPs are not implemented; and

c) Urban runoff where the drainage area is not properly managed.

10. A number of permits were adopted to address pollution from the sources identified in Finding 9, above. The State Board issued two statewide general NPDES permits: one for storm water runoff from industrial activities (NPDES No.

[1] Best Management Practices (BMPs) are water quality management practices that are maximized in efficiency for the control of storm water runoff pollution.

CAS000001, General Industrial Activities Storm Water Permit) and the second one for storm water runoff from construction sites (NPDES No. CAS000002, General Construction Activity Storm Water Permit). Industrial activities (as identified in 40 CFR 122.26(b)(14) and construction sites on five acres or more, are required to obtain coverage under these statewide general permits. The permittees have developed project conditions of approval requiring coverage under the State's General Permit for new developments to be implemented at the time of grading or building permit issuance for construction sites on five acres or more and at the time of local permit issuance for industrial facilities. The State Board also adopted Order No. 99-06-DWQ, NPDES No. CAS000003, for storm water runoff from facilities owned and/or operated by Caltrans (including freeways and highways). The Regional Board adopted Order 99-11, NPDES No. CAG018001, for concentrated animal feeding operations, including dairies. The Regional Board also issues individual storm water permits for certain industrial facilities within the Region. Currently there are 22 individual storm water NPDES permits in the Region; 10 of these facilities are located in the San Bernardino County area. Additionally, for a number of facilities that discharge process wastewater and storm water, storm water discharge requirements are included with their facilities' NPDES permit for process wastewater.

11. In most cases, the industries and construction sites covered under the Statewide General Industrial and Construction Permits discharge into storm drains and/or flood control facilities owned and operated by the permittees. These industries and construction sites are also regulated under local laws and regulations. Furthermore, the permittees authorize and permit developments within their jurisdiction, and they own, operate, and control the MS4 systems. The permittees approve residential, commercial, and industrial developments, and cause urbanization of the area and also benefit from it. Therefore, they have a responsibility to address any water quality problems resulting from this urbanization. The Regional Board administers compliance with the State's General Industrial Activities Storm Water Permit and the General Construction Activity Storm Water Permit. A coordinated effort between the permittees and the Regional Board staff is critical to avoid duplicative and overlapping efforts when overseeing the compliance of dischargers covered under the Statewide General Permits. As part of this coordination, the permittees have been notifying Regional Board staff when during their routine activities, they observe conditions that pose a threat or potential threat to water quality, or an industrial facility or construction activity that has failed to obtain coverage under the appropriate general storm water permit.

12. This order regulates urban storm water runoff[2] from areas under the jurisdiction

[2] Urban storm water runoff includes those discharges from residential, commercial, industrial and construction areas within the permitted area and excludes discharges from feedlots, dairies and farms.

of the permittees. The term storm water as used in this order includes storm water runoff, snowmelt runoff, and surface runoff and drainage. The permittees have jurisdiction over and/or maintenance responsibility for storm water conveyance systems within San Bernardino County. The permittees may lack legal jurisdiction over storm water discharges into their systems from some of the State and federal facilities, utilities and special districts, Native American tribal lands, waste water management agencies and other point and non-point source discharges otherwise permitted by the Regional Board. The Regional Board recognizes that the permittees should not be held responsible for such facilities and/or discharges.

13. Certain activities that generate pollutants present in storm water runoff may be beyond the ability of the permittees to eliminate. Examples of these include operation of internal combustion engines, atmospheric deposition, brake pad wear, tire wear and leaching of naturally occurring minerals from local geography. This order is intended to regulate the discharge of pollutants in urban storm water runoff from anthropogenic (generated from human activities) sources and is not intended to address background or naturally occurring pollutants or flows.

14. A major portion of San Bernardino County is being urbanized with residential, commercial, and industrial developments. Urban development increases impervious surfaces and storm water runoff volume and velocity; and decreases vegetated pervious surface available for infiltration of storm water. Increase in runoff volume and velocity causes scour, erosion (sheet, rill and/or gully), aggradation (raising of a streambed from sediment deposition), changes in fluvial geomorphology, hydrology, and changes in aquatic ecosystem. The local agencies (the permittees) are the owners and operators of the MS4 systems and have authority to control discharges to these systems. The permittees have established appropriate legal authority to control discharges into their respective MS4 systems. They adopted grading and/or erosion control ordinances, guidelines and best management practices (BMPs) for municipal, commercial, and industrial activities. The permittees must exercise a combination of these programs, policies, and legal authority to minimize pollutant loads resulting from urbanization.

15. If not properly controlled and managed, urbanization could result in the discharge of pollutants into storm water runoff. Urban area runoff (Finding 9.c.) may contain elevated levels of pathogens (bacteria, protozoa, viruses), sediment, trash, fertilizers (nutrients, nitrogen and phosphorus compounds), pesticides (DDT, chlordane, diazinon, chlorpyrifos), heavy metals (cadmium, chromium, copper, lead, zinc), and petroleum products (oil, grease, petroleum hydrocarbons, polycyclic aromatic hydrocarbons). Storm water can carry these pollutants to rivers, streams, lakes, bays and the ocean (receiving waters).

16. These pollutants can then impact the beneficial uses of the receiving waters and can cause or threaten to cause a condition of pollution or nuisance. Pathogens

(from sanitary sewer overflows, septic system leaks, spills and leaks from portable toilets, pets, wildlife, and human activities) can impact water contact recreation, non-contact water recreation and shellfish harvesting. On a nationwide basis, microbial contamination of the beaches from urban runoff and other sources has resulted in beach closures and health advisories. Floatables (from trash) are an aesthetic nuisance and can be a substrate for algae and insect vectors. Oil and grease can coat birds and aquatic organisms, adversely affecting respiration and/or thermoregulation. Other petroleum hydrocarbon components can cause toxicity to aquatic organisms and can impact human health. Suspended and settleable solids (from sediment, trash, and industrial activities) can be deleterious to benthic organisms and may cause anaerobic conditions to form. Sediments and other suspended particulates can cause turbidity, clog fish gills and interfere with respiration in aquatic fauna. They can also screen out light, hindering photosynthesis and normal aquatic plant growth and development. Toxic substances (from pesticides, herbicides, petroleum products, metals, and industrial wastes) can cause acute and/or chronic toxicity, and can bioaccumulate in aquatic resources (sediments and biota) to levels, which are harmful to human health. Nutrients (from fertilizers, confined animal facilities, pets, and birds) can cause excessive algal blooms. These blooms can lead to problems with taste, odor, color and increased turbidity, and can depress the dissolved oxygen content, leading to fish kills.

17. The water quality assessment conducted by Regional Board staff has identified a number of other beneficial use impairments from urban runoff. Section 303(b) of the CWA requires each of the regional boards to routinely monitor and assess the quality of waters of the region. If this assessment indicates that beneficial uses are not met, then that waterbody must be listed under Section 303(d) of the CWA as an impaired waterbody. The 1998 water quality assessment listed a number of water bodies within the Region under Section 303(d) as impaired waterbodies. In the San Bernardino County area, these include: (1) Big Bear Lake (listed for copper, mercury, metals, noxious aquatic plants, nutrients and sedimentation/siltation); (2) Summit Creek (listed for nutrients); (3) Knickerbocker Creek (listed for metals and pathogens); (4) Grout Creek (listed for metals and nutrients); (5) Rathbone Creek (listed for nutrients, sedimentation/siltation); (6) Mountain Home Creek (listed for pathogens); (7) Mill Creek, Reaches 1 and 2, (listed for pathogens); (8) Santa Ana River, Reach 4 (listed for pathogens); (9) Lytle Creek (listed for pathogens); (10) Chino Creek, Reaches 1 and 2 (listed for high coliform count); (11) Cucamonga Creek, Valley reach (listed for high coliform count); (12) Mill Creek (Prado Area) (listed for nutrients); and, (13) Prado Park Lake (listed for nutrients and pathogens). For some of these impaired waterbodies, the cause of impairment is listed as urban runoff.

18. Federal regulations require that a total maximum daily load (TMDL) be established for each 303(d) listed waterbody for each of the pollutants causing impairment. The TMDL is the total amount of the problem pollutant that can be

discharged while water quality standards in the receiving water are attained, i.e. water quality objectives are met and the beneficial uses are protected. It is the sum of the individual wasteload allocations (WLA) for point source inputs, load allocations (LA) for non-point source inputs and natural background, with a margin of safety. The TMDLs are the basis for limitations established in waste discharge requirements. TMDLs are being developed for sediment, pathogens, and nutrients and other pollutants for impaired water bodies in San Bernardino County. Dischargers to these water bodies are currently cooperating in the development of these TMDLs. It is expected that once the TMDLs and an implementation plan are developed, the stakeholders will cooperate and implement the plan. To avoid any duplicative efforts, this permit does not include any further requirements based on TMDLs. However, this permit may be reopened to include TMDL implementation, if other implementation methodologies are not effective.

19. The MS4s generally contain non-storm water flows such as irrigation runoff, residential car washes, runoff from miscellaneous washing and cleaning operations, and other nuisance flows. Discharges of non-storm water containing pollutants into the MS4 systems and to waters of the U.S. are prohibited unless they are regulated under separate NPDES permit; or are exempt as indicated in Discharge Prohibition, Section III, Item 4 of this order.

20. Order No. 90-136 (first term permit) required the permittees to develop and implement a drainage area management plan (DAMP) and a storm water and receiving water monitoring plan, to eliminate illegal and illicit discharges to the MS4s and to enact the necessary legal authority to effectively prohibit such discharges. The overall goal of these requirements was to reduce pollutant loading to surface waters from urban runoff to the maximum extent practicable (MEP)[3]. Order No. 96-32 (second term permit) required continued implementation of the DAMP and the monitoring plan, and required the permittees to focus on those areas which threaten the beneficial uses.

21. This order (Order No. 01-16, third term permit) outlines additional steps for an effective storm water management program and specifies requirements to protect the beneficial uses of all receiving waters. This order requires the permittees to examine sources of pollutants in storm water runoff from activities that the permittees conduct, approve, regulate and/or authorize by issuing a license or permit.

22. The Report of Waste Discharge (the permit renewal application) included the following major elements:

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[3] Maximum Extent Practicable (MEP) means to the maximum extent possible, taking into account equitable considerations of synergistic, additive, and competing factors, including but not limited to, gravity of the problem, fiscal feasibility, public health risks, societal concerns, and social benefits.

a. Summary of accomplishments and water quality monitoring results during the second term permit;

b. Proposed Municipal Storm Water Management Program (MSWMP) for the third term . (the MSWMP, included in the ROWD for the third term permit, replaces the DAMP from the first term permit) ;

c. Performance commitments for Proposed Program Elements;

d. Guidelines for New Development and Redevelopment; and

e. A revised Water Quality Monitoring Plan.

23. The permittees own and/or operate facilities where industrial or related activities take place that may have an impact on storm water quality. Some of the permittees also enter into contracts with outside parties to carry out municipal related activities that may also have an impact on storm water quality. These facilities and related activities include, but are not limited to, street sweeping, catch basin cleaning, maintenance yards, vehicle and equipment maintenance areas, waste transfer stations, corporation and storage yards, parks and recreational facilities, landscape and swimming pool maintenance activities, storm drain system maintenance activities and the application of herbicides, algaecides and pesticides. The permittees have prepared an environmental performance report for appropriate public facilities under their jurisdiction, and identified best management practices for those activities found to require pollution prevention measures. Non-storm water discharges from these facilities and/or activities could also affect water quality. This order prohibits non-storm water discharges from public facilities unless the discharges are exempt under Section III, Discharge Limitations, 4 & 6 of this order or are permitted by the Regional Board under an individual NPDES permit. The second term permit required the permittees to develop and implement a model Municipal Activities Pollution Prevention Strategy (MAPPS), including sewage spill response, maintenance practices at parks and recreation facilities, street sweeping and public agency employee training.

24. Successful implementation of the provisions and limitations in this order will require the cooperation of other entities and all the public agency organizations within San Bernardino County (e.g., Fire Department, Building and Safety, Code Enforcement, Planning, etc.) having programs/activities that have an impact on storm water quality. A list of these organizations is included in Attachment 3. As such, these organizations are expected to actively participate in implementing the San Bernardino County NPDES Storm Water Program. The permittees have developed inter-departmental training programs and have made commitments to conduct a certain number of these training programs during the term of this permit. The Regional Board has the discretion and authority to require non-cooperating entities to participate in this areawide permit or obtain individual

storm water discharge permits, pursuant to 40 CFR 122.26(a). The permittees have developed an Implementation Agreement among the SBCFCD, the County and the cities. The Implementation Agreement establishes the responsibilities of each party and a funding mechanism for the shared costs, and recognizes the Management Committee.

25. The major focus of storm water pollution prevention is the development and implementation of appropriate MSWMP including best management practices (BMPs). The ultimate goal of the urban storm water management program is to support attainment of water quality consistent with the water quality objectives for the receiving waters in order to protect beneficial uses through the implementation of the MSWMP.

26. The MSWMP is a dynamic document and the permittees have implemented, or are in the process of implementing, the various elements of the MSWMP. During the second permit term, the DAMP for the San Bernardino County areawide permit was replaced by the Municipal Storm Water Management Plan contained in the Report of Waste Discharge (ROWD 1995). This order requires the permittees to continue to implement the BMPs listed in the ROWD (2000) and to effectively prohibit illegal and illicit discharges to the storm drain system.

27. Urban runoff contains pollutants from privately owned and operated facilities such as residences, businesses, private and/or public institutions, and commercial establishments. Therefore, a successful storm water management plan should include the participation and cooperation of the public, businesses, the permittees and the regulators. The ROWD (2000) has a strong emphasis on public education.

28. The San Bernardino County ROWD (2000) defined: (1) a management structure to facilitate permittees' compliance efforts; (2) a formal agreement to underpin cooperation; and (3) detailed municipal efforts to develop, implement, and evaluate various BMPs or control programs in the areas of public agency activities, public information, new development and construction, public works construction, industrial discharger identification, and illicit discharger/connection identification and elimination. The ROWD also defined a surface water quality monitoring program.

29. In order to characterize storm water discharges, to identify problem areas, to determine the impact of urban runoff on receiving waters, and to determine the effectiveness of the various BMPs, an effective monitoring program is critical. The principal permittee administers the monitoring program for the permittees. This program includes storm drain outfall monitoring, receiving water monitoring, and dry weather monitoring. The monitoring data from the last decade identified elevated pollutant levels at monitoring stations 2, 3, and 5. Drainage at Station 2 is influenced by mixed commercial and industrial land uses. Station 3 is characterized by mixed land uses including agricultural. Station 5 is influenced by commercial and light industrial land uses. These areas could be targeted for

special pollutant source identification and control programs. The monitoring data indicated some spatial differences in water quality between San Bernardino County's major watersheds.

30. The Strategic Plan and Initiatives (June 22, 1995) and the 2001 Draft Strategic Plan for the State Water Resources Control Board and the Regional Water Quality Control Boards recognize the importance of an integrated watershed management approach. The Regional Board also recognizes that a watershed management program should integrate all related programs, including the storm water programs and TMDL processes. Further, the State Board is required by SB 72 (Water Code Section 13383.5) to develop a statewide municipal storm water monitoring program. Consistent with this approach, some of the monitoring programs have already been integrated into regional monitoring programs. This order requires the permittees to develop an integrated watershed monitoring program by July 1, 2003.

31. Illegal discharges[4] to the storm drains could contribute to storm water and other surface water contamination. A reconnaissance survey of the municipal storm drain systems (open channels and underground storm drains) was completed by the permittees. The permittees also developed a program to prohibit illicit connections to their storm drains and flood control facilities. Continued surveillance and enforcement of these programs are required to eliminate illicit connections and illegal discharges. The permittees have a number of mechanisms in place to eliminate illegal discharges to the MS4s, including industrial facility inspections, drainage facility inspections, water quality monitoring programs, and public education. The permittees also developed a summary format for illegal discharge reporting. During the second term permit, the permittees completed a reconnaissance survey of the MS4s to detect and eliminate any illicit connections (undocumented or unpermitted connections to the MS4s). The permittees have trained their staff on illegal discharge surveillance cleanup procedures. The permittees will continue to monitor for any new illicit connections and will concentrate on preventing/cleanup of illegal discharges.

32. The permittees have the authority to control pollutants in storm water discharges, to prohibit illegal discharges/illicit connections, to control spills, and to require compliance and carry out inspections of the storm drain systems within their respective jurisdictions. The permittees have various forms of legal authority in place, such as charters, State Code provisions for General Law cities, the San Bernardino County Flood Control Ordinance, San Bernardino County Water Pollution Ordinance, various county ordinances which address industrial wastes

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[4] Illegal discharge means any discharge (or seepage) to the municipal separate storm sewer that is not composed entirely of storm water except for the authorized discharges listed in Section III of this permit. Illegal discharges include the improper disposal of wastes into the storm sewer system.

and waste discharges within the unincorporated areas, city ordinances, and applicable portions of municipal codes and the State Water Code, to regulate storm water/urban runoff discharges.

33. In order to promote countywide consistency and to provide a legal underpinning to the entire San Bernardino County Storm Water Program, a model Storm Drain Ordinance was completed in the first permit term and was adopted by all the permittees. The permittees are required to evaluate the effectiveness of their existing enforcement authority to determine the need for enhancement of their legal authority to administer civil and/or criminal penalties for violations of Storm Drain Ordinance.

34. Pollution prevention techniques, appropriate planning processes, and early identification of potential storm water impacts and mitigation measures can significantly reduce storm water pollution problems. During the second permit term, the permittees have completed the review and made the necessary revisions to consider storm water quality impacts and appropriate mitigation measures in the planning procedures and in the California Environmental Quality Act (CEQA) review process for specific projects, Master Plans, etc. The County of San Bernardino already requires a Water Quality Management Plan, which addresses permanent post-construction BMPs, in addition to the SWPPP, required by the statewide general permit for construction activity. The permittees are encouraged to propose and participate in watershed wide and/or regional water quality management programs.

35. Successful implementation of the provisions and limitations in this order will require the cooperation of all the public agency organizations within San Bernardino County having programs/activities that have an impact on storm water quality (e.g. Fire Department, Building and Safety, Code enforcement, etc.). As such, these organizations are expected to actively participate in implementing this areawide storm water program.

36. In accordance with the Clean Water Act and its implementing regulations, this order requires the permittees to develop and implement programs and policies necessary to minimize the discharge of pollutants in urban runoff to waters of the U. S. to the maximum extent practicable.

37. The legislative history and the preamble to the federal storm water regulations indicate that the Congress and the U.S. EPA were aware of the difficulties in regulating urban storm water runoff solely through traditional end-of-pipe treatment. However, it is the Regional Board's intent that this order requires the implementation of best management practices to reduce to the maximum extent practicable the discharge of pollutants in storm water from the MS4s in order to support attainment of water quality standards. This order, therefore, includes Receiving Water Limitations based on water quality objectives and the prevention of nuisance and reduction of water quality impairment in receiving waters. In accordance with Section 402 (p) of the Clean Water Act, this order requires the

permittees to implement control measures in accordance with the approved ROWD that will reduce pollutants in storm water discharges to the maximum extent practicable. The Receiving Water Limitations similarly require the implementation of control measures to the extent that they are technically and economically feasible to protect beneficial uses and attain water quality objectives of the receiving waters.

38. The Regional Board finds that the unique aspects of the regulation of storm water discharges through municipal storm sewer systems, including intermittent discharges, difficulties in monitoring and limited physical control over the discharge, will require adequate time to implement and evaluate the effectiveness of best management practices. Therefore, the permit includes a procedure for determining whether storm water discharges are causing exceedances of receiving water limitations and for evaluating whether the MSWMP contained in the ROWD must be revised. The order establishes an iterative process to determine compliance with the receiving water limitations.

39. The permittees are required to conduct inspections of construction sites, industrial facilities and commercial establishments. To avoid duplicative efforts, the permittees need not inspect facilities that have been inspected by Regional Board staff if the inspection was conducted during the specified time period. Regional Board staff inspection data will be posted regularly on its internet site. It is anticipated that many of the inspections required under this order can and will be carried out by inspectors currently conducting inspections for the permittees (i.e., grading, building, code enforcement, etc.), during their normal duties.

40. A revised Water Quality Control Plan (Basin Plan) was adopted by the Regional Board and became effective on January 24, 1995. The Basin Plan contains water quality objectives and beneficial uses for water bodies in the Santa Ana Region. The Basin Plan also incorporates by reference all State Board water quality control plans and policies including the 1990 Water Quality Control Plan for Ocean Waters of California (Ocean Plan) and the 1974 Water Quality Control Policy for Enclosed Bays and Estuaries of California (Enclosed Bays and Estuaries Plan).

41. The requirements contained in this order are necessary to implement the plans and policies described in Finding 48, above. These plans and policies contain numeric and narrative water quality standards for the water bodies in this Region. This order does not contain numeric effluent limitations for any constituents because the impact of the storm water discharges on the water quality of the receiving waters has not yet been fully determined. Continuation of water quality/biota monitoring and analysis of the data are essential to make that determination. The existing Basin Plan, or any further changes to the Basin Plan may be grounds for the permittees to revise some or all of its ROWD.

42. The permittees will be required to comply with any applicable future water quality

standards or discharge requirements that may be imposed by the EPA or State of California prior to the expiration of this order. This order may be reopened to include TMDLs and/or other requirements developed and adopted by the Regional Board. The permittees may petition the Regional Board to issue a separate NPDES permit to any discharger of non-storm water into storm drain systems that they own or operate.

43. The permittees have developed a Storm Water Implementation Agreement between the County, its cities and the San Bernardino County Flood Control District. The Implementation Agreement established the responsibilities of each party and a funding mechanism for the shared costs and recognizes the establishment of Management Committee for overall guidance and as a decision making body.

44. It is important to control litter and eliminate trash and other materials in stormwater runoff. In addition to the municipal ordinances prohibiting litter, the permittees also organize solid waste collection programs, household hazardous waste collections, and recycling programs to reduce litter and illegal discharges.

45. Reach 4 of the Santa Ana River which extends from Mission Boulevard in Riverside to the San Jacinto Fault in San Bernardino is an impaired water body listed on the 303(d) list for pathogens from non-point sources. These elevated levels may in part be attributed to discharges from the MS4 systems. This order requires the permittees to investigate and characterize MS4 discharges to tributaries to the Santa Ana River, Reach 4, for potential bacterial contribution.

46. Public education is an important part of storm water pollution prevention. The permittees have employed a variety of means to educate the public, business and commercial establishments, industrial facilities and construction sites. The permittees are required to continue their efforts in public education programs.

47. The permittees established a subcommittee consisting of a number of permittees, the Building Industry Association, the development industry, the California Restaurant Association, and the Western States Petroleum Association and developed the Guidelines for New Development and Redevelopment and developed a list of routine structural and non-structural Best Management Practices for new development (1-5 acres)". The permittees are implementing the BMPs from this guidance document and are requiring new developments and significant redevelopments to develop and implement appropriate Water Quality Management Plans (WQMP). This order requires additional structural and non-structural BMPs for new developments and significant redevelopments only if an equivalent regional and/or watershed wide management program is not being implemented.

48. The Regional Board and the permittees recognize the importance of watershed management initiatives and regional planning and coordination in the development and implementation of programs and policies related to water quality protection. A number of such efforts are under way where the permittees

are active participants. This order encourages continued participation in such programs and policies. The Regional Board also recognizes that in certain cases, diversion of funds targeted for certain monitoring programs to regional monitoring programs may be necessary. The Executive Officer is authorized to approve the watershed management initiatives, regional planning and coordination programs and regional monitoring programs.

49. The storm water regulations require public participation in the storm water management program development and implementation. As such the permittees are required to solicit and consider all comments received from the public and submit copies of the comments to the Executive Officer of the Regional Board. In response to public comments, the permittees may modify reports, plans, or schedules prior to submittal to the Executive Officer.

50. In accordance with California Water Code Section 13389, the issuance of waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.

51. The Regional Board has considered anti-degradation requirements, pursuant to 40 CFR 131.12 and State Board Resolution 68-16, for the permitted discharge. This order requires implementation of programs (i.e., BMPs) to reduce the level of pollutants in the storm water discharges. The combination of programs and policies required to be implemented under this order for new and existing developments are designed to improve storm water quality. The Regional Board finds that the storm water discharges are consistent with the federal and state anti-degradation requirements and a complete anti-degradation analysis is not necessary.

52. The Regional Board has notified the permittees and interested parties of its intent to issue waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

53. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED that the permittees, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act, as amended, and the regulations and guidelines adopted thereunder, shall comply with the following:

I. RESPONSIBILITIES OF THE PRINCIPAL PERMITTEE:

The principal permittee shall be responsible for managing the overall storm water program and shall:

1. Conduct chemical, biological and bacteriological water quality monitoring as required by the Executive Officer of the Regional Board.

2. Conduct inspections and maintain the storm drain systems within its jurisdiction.

3. Implement management programs, monitoring programs, and related plans as required by this order.

4. Prepare and submit to the Executive Officer of the Regional Board, unified reports, plans, and programs necessary to comply with this order.

5. Review and revise, if necessary, policies and ordinances necessary to establish and maintain adequate legal authority, as required by the Federal Storm Water Regulations.

6. Respond to or arrange for responding to emergency situations such as accidental spills, leaks, illicit connections/illegal discharges, etc., to prevent or to reduce the discharges of pollutants to storm drain systems and waters of the U.S.

7. Take appropriate enforcement actions for illegal discharges to the MS4 systems within its jurisdiction.

In addition, the activities of the principal permittee shall, at a minimum, include the following:

8. Coordinate and conduct Management Committee meetings as specified in the ROWD. The principal permittee will take the lead role in initiating and developing area-wide programs and activities necessary to comply with the NPDES Permit.

9. Coordinate permit activities and participate in any subcommittees formed as necessary, to coordinate compliance activities with this order.

10. Provide technical and administrative support and inform the co-permittees of the progress of other pertinent municipal programs, pilot projects, research studies, etc.

11. Coordinate the implementation of area-wide storm water quality management activities such as monitoring program, public education, pollution prevention, etc.

12. Gather and disseminate information on the progress of statewide municipal storm water programs and evaluate the information for potential use in the execution of this order.

13. Monitor the implementation of the plans and programs required by this order and determine their effectiveness in attaining water quality standards. This determination shall include a comparative analysis of monitoring data to the USEPA Multi-Sector Permit Parameter Benchmark Values and applicable water quality objectives for inland surface streams as specified in Chapter 4 of the Basin Plan. A pollutant source investigation and control plan shall be specified where elevated pollutant levels are identified. This evaluation shall be included in the annual report submitted to the Executive Officer.

14. Coordinate with the Regional Board activities pertaining to implementation of this order, including the submittal of all reports, plans, and programs as required under this order.

15. Solicit and coordinate public input for any major proposed storm water management programs and implementation plans.

16. Develop and implement mechanisms, performance standards, etc., to promote consistent implementation of BMPs among the permittees.

17. In conjunction with the other permittees, implement the BMPs listed in the Report of Waste Discharge (ROWD).

18. Cooperate in watershed management programs and regional and/or statewide monitoring programs.

II. RESPONSIBILITIES OF THE CO-PERMITTEES

The co-permittees shall be responsible for managing the storm water program within its jurisdiction and shall:

1. Implement all program elements including but not limited to the management programs, monitoring programs, implementation plans and all BMPs outlined in the ROWD within each respective jurisdiction.

2. Enact and revise policies and ordinances necessary to establish and maintain adequate legal authority as stated in Section V (10) of this Order and as required by the Federal Storm Water Regulations, 40CFR, Part 122.26(d)(2)(i)(A-F). By July 1, 2002, the permittees shall evaluate their ordinances to determine if they are authorized to impose administrative fines for storm water violations. Government Code Section 53069.4 authorizes cities to make violations of any ordinance subject to an administrative fine or penalty instead of criminal prosecution. If necessary, the permittees shall adopt ordinances to set a penalty structure and to authorize them to impose and collect fines administratively.

3. Conduct storm drain system inspections and maintenance in accordance with the uniform criteria developed by a subcommittee of the permittees.

4. Take appropriate enforcement actions for violations of the storm water regulations and ordinances for illegal discharges into the MS4 systems within the co-permitees' jurisdiction.

5. Prepare and submit to the principal permittee in a timely manner all required information necessary to develop a unified report for submittal to the Executive Officer of the Regional Board.

6. Designate at least one representative to the Management Committee and attend at least 9 out of the 11 Management Committee meetings per year. The Principal Permittee shall be notified immediately of any changes to the designated representative to the Management Committee.

7. Conduct and/or coordinate with the principal permittee any surveys and characterizations needed to identify pollutant sources from specific drainage areas.
8. Review and comment on all plans, strategies, management programs, monitoring programs, as developed by the principal permittee or any subcommittee to comply with this order.
9. Participate in committees or subcommittees formed to address storm water related issues to comply with this order.
10. Respond to emergency situations such as accidental spills, leaks, illegal discharges/illicit connections, etc. to prevent or reduce the discharge of pollutants to storm drain systems and waters of the U.S.
11. Pursue enforcement actions as necessary within its jurisdiction to ensure compliance with storm water management programs, ordinances and implementation plans including physical elimination of undocumented connections and illegal discharges.

III. DISCHARGE LIMITATIONS/PROHIBITIONS

1. In accordance with the requirements of 40 CFR 122.26(d)(2)(I)B) and 40 CFR 122.26(d)(2)(I)(F), the permittees shall prohibit illicit connections and illegal discharges (non-storm water) from entering municipal separate storm sewer systems.
2. The discharge of storm water from permittees' municipal separate storm sewer systems to waters of the United States containing pollutants that have not been reduced to the maximum extent practicable is prohibited.
3. The permittees shall effectively prohibit the discharge of non-storm water into the MS4s unless such discharges are authorized by either a separate NPDES permit or as otherwise specified in this provision. The discharges identified below need not be prohibited by the permittees. If however, any of these discharges are identified by the permittees or the Executive Officer as a significant source of pollutants, coverage under the Regional Board's De Minimus permit may be required.
    a) Discharges covered by NPDES permits or written clearances issued by the Regional or State Board,
    b) Potable water line flushing and other potable water sources,
    c) Air conditioning condensate,
    d) Landscape irrigation, lawn garden watering and other irrigation waters,
    e) Passive foundation drains,
    f) Passive footing drains,

g) Water from crawl space pumps,

h) Dechlorinated swimming pool discharges,

i) Non-commercial vehicle washing,

j) Diverted stream flows,

k) Rising ground waters and natural springs,

l) Ground water infiltration as defined in 40 CFR 35.2005 (20) and uncontaminated pumped groundwater,

m) Flows from riparian habitats and wetlands,

n) Emergency fire fighting flows (i.e., flows necessary for the protection of life and property) do not require BMPs and need not be prohibited. However, appropriate BMPs shall be considered where practicable when not interfereing with health and safety issues (see also Section XIX, Provision 4);

o) Waters not otherwise containing wastes as defined in California Water Code Section 13050 (d), and

p) Other types of discharges identified and recommended by the permittees and approved by the Regional Board.

The Regional Board may issue Waste Discharge Requirements for discharges exempted from NPDES requirements, such as agricultural irrigation waters, if identified to be a significant source of pollutants. The Executive Officer may add categories of non-storm water discharges that are not significant sources of pollutants or remove categories of non-storm water discharges listed above based upon a finding that the discharges are a significant source of pollutants.

4. For purposes of this order, a discharge may include storm water or other types of discharges identified in item 3, above.
5. Non-storm water discharges from permittees' activities into waters of the U.S. are prohibited unless the non-storm water discharges are permitted by an NPDES permit or are included in Item 3, above.
6. The permittees shall reduce the discharge of pollutants, including trash and debris, from the storm water conveyance systems to the maximum extent practicable.
7. Discharges from the MS4s shall be in compliance with the discharge prohibitions contained in Chapter 5 of the Basin Plan.

IV. RECEIVING WATER LIMITATIONS

1. Discharges from the MS4s shall not cause exceedances of receiving water quality standards (designated beneficial uses and water quality objectives) contained in the Basin Plan, and amendments thereto, for surface or groundwater.

2. Discharges from the MS4s of storm water, or non-storm water, for which a Permittee is responsible, shall not cause or contribute to a condition of nuisance as that term is defined in Section 13050 of the Water Code.
3. The permittees shall comply with Sections III.2 and IV of this order through timely implementation of control measures and other actions to reduce pollutants in urban storm water runoff to the maximum extent practicable in accordance with the ROWD and other requirements of this order including any modifications thereto.
4. If exceedances of water quality standards persist, notwithstanding implementation of the ROWD and other requirements of this order, the permittees shall assure compliance with Sections III.2 and IV of this order by complying with the following procedure:
    a) Upon a determination by either the permittees or the Executive Officer that the discharges from the MS4 systems are causing or contributing to an exceedance of an applicable water quality standard, the permittee shall promptly notify and thereafter submit a report to the Executive Officer that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. Determination of the effect of discharges from the MS4 systems on water quality standards shall include a comparative analysis of monitoring data to the USEPA Multi-Sector Permit Parameter Benchmark Values and applicable water quality objectives for inland surface streams as specified in Chapter 4 of the Basin Plan. A pollutant source investigation and control plan shall be developed and implemented where elevated pollutant levels are identified. The report shall address the causes of the impairment or exceedance, and the technical and economic feasibility of control actions available to the Permittees to reduce or eliminate the impairment or exceedance. The report may be incorporated in the annual report unless the Executive Officer directs an earlier submittal. The report shall include an implementation schedule. The Executive Officer may require modifications to the report;
    b) Submit any modifications to the report required by the Executive Officer within 30 days of notification;
    c) Within 30 days following approval of the report described above by the Executive Officer, the permittees shall revise the storm water management programs and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring required;
    d) Implement the revised storm water management programs and monitoring program in accordance with the approved schedule.

So long as the permittees have complied with the procedures set forth above and are implementing the revised storm water management programs, the permittees do not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless the Executive Officer determines it is necessary to do so in order to satisfy the maximum extent practicable standard.

V. IMPLEMENTATION AGREEMENT

No later than November 30 of each year, the permittees shall evaluate the storm water management structure and the Implementation Agreement and determine the need for any revision. The annual report shall include the findings of this review and a schedule for any needed revisions.

VI. LEGAL AUTHORITY/ENFORCEMENT

1. The permittees shall maintain and enforce adequate legal authority to control contribution of pollutants to the MS4 by storm water discharges associated with industrial activities.
2. The permittees shall take appropriate enforcement actions, including monetary penalties, non-monetary penalties, bonding requirements, and/or permit denials, suspension, or revocation, against any violators of their codes and/or ordinances in accordance with the formalized enforcement procedures developed by the Management Committee.
3. The permittees shall continue to provide notification to Regional Board staff regarding storm water related information gathered during site inspections of industrial and construction sites regulated by the Statewide General Storm Water Permits or sites which should be regulated under the State's General Permits. The notification should include any observed violations of the General Permits, prior history of violations, any enforcement actions taken by the permittee, and any other relevant information.
4. By July 1, 2003, the permittees shall review the ordinances that establish legal authority required by this permit to determine the effectiveness of these ordinances in prohibiting or otherwise controlling the following types of discharges to the MS4s:
    a) Sewage, where a co-permittee operates the sewage collection system;
    b) Wash water resulting from the hosing or cleaning of gas stations, and other type of automobile service stations;
    c) Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility including motor vehicles, concrete mixing equipment, portable toilet servicing, etc.;

d) Wash water from mobile auto detailing and washing, steam and pressure cleaning, carpet cleaning, etc.;

e) Water from cleaning of municipal, industrial, commercial, residential areas (including parking lots), streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas containing chemicals or detergents and without prior sweeping, etc.;

f) Runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials,

g) Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; pool filter backwash containing debris and chlorine;

h) Pet waste, yard waste, debris, sediment, etc;

i) Restaurant wastes such as grease, floor mat and trash bin wash water, food waste, etc.

5. The Principal Permittee or subcommittee shall, on or before November 15, 2002, develop a restaurant inspection program which shall, at a minimum address:

   a. Oil and grease disposal to verify that these wastes are not poured onto a parking lot, street or adjacent catch basin;

   b. Trash bin areas to verify that these areas are clean, the bin lids are closed, the bins are not filled with liquid, and the bins have not been washed out;

   c. Parking lot, alley, sidewalk and street areas to verify that floormats, filters and garbage containers are not washed in those areas and that no washwater is poured in those areas;

   d. Parking lot areas to verify that they are cleaned by sweeping, not by hosing down and that the facility operator uses dry methods for spill cleanup; and,

   e. Inspection of existing devices designed to separate grease from wastewater (e.g., grease traps or interceptors) to ensure adequate capacity and proper maintenance.

6. By November 15, 2003, each permittee shall submit a statement, signed by legal counsel, that the permittee has obtained all necessary legal authority to comply with this Order through adoption of ordinances and/or municipal code modifications.

VII. ILLEGAL DISCHARGE/ILLICIT CONNECTIONS; LITTER, DEBRIS AND TRASH CONTROL

1. The permittees shall continue to prohibit all illicit connections and illegal discharges to the MS4s through their ordinances, inspections, and monitoring programs. If routine inspections or dry weather monitoring indicate any illicit connections, they shall be investigated and eliminated or permitted within 60 days of discovery and identification.
2. All reports of spills, leaks, and/or illegal dumping shall be promptly investigated. Those incidents that may pose an immediate threat to human health or the environment (e.g., sewage spills that could impact water contact recreation, an oil spill that could impact wild life, a hazardous substance spill where residents are evacuated, etc.) shall be reported to the Executive Officer within 24 hours by phone or e-mail, with a written report within 5 days. At a minimum, all sewage spills above 1,000 gallons and all reportable quantities of hazardous substance spills as per 40 CFR 117 and 302 shall be reported within 24 hours and all other spill incidents shall be included in the annual report. The permittees may propose a reporting program, including reportable incidents and quantities, jointly with other agencies such as the County Health/Fire Department for approval by the Executive Officer.
3. The permittees shall implement appropriate control measures to reduce and/or to eliminate the discharge of trash and debris to waters of the U.S. These control measures shall be reported in the annual report.
4. By July 1, 2003, the permittees shall review their litter/trash control ordinances to determine the need for any revision. The permittees are encouraged to characterize trash, determine its main source(s), and develop and implement appropriate BMPs to control trash in urban runoff. The findings of this review shall be included in the annual report for 2003.
5. By July 1, 2003, the permittees shall determine the need for any additional debris control measures. The findings shall be included in the annual report for 2003.

VIII. MUNICIPAL INSPECTIONS OF CONSTRUCTION SITES

1. The permittees shall develop by November 15, 2002, an inventory of all construction sites within their jurisdiction for which building or grading permits are issued and activities at the site include; soil movement; uncovered storage of materials or wastes, such as dirt, sand, or fertilizer; or exterior mixing of cementaceous products, such as concrete, mortar, or stucco, regardless of whether the construction site is subject to the California Statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities (General Permit), or other individual NPDES permit. This database shall be updated prior to each rainy season thereafter. This inventory shall be maintained in a computer-based database system and shall include relevant information on site ownership, General

Permit Waste Discharge Identification (WDID) # (if any), size, location, etc. Inclusion of a Geographical Information System (GIS) is recommended but not required.

2. To establish priorities for inspection requirements under this order, the permittees shall prioritize construction sites within their jurisdiction as a high, medium, or low threat to water quality. Evaluation of construction sites should be based on such factors as soil erosion potential, project size, proximity and sensitivity of receiving waters and any other relevant factors. At a minimum, high priority construction sites shall include: sites over 50 acres; and sites over 5 acres that are tributary to Clean Water Act section 303(d) waters listed for sediment or turbidity impairments.

3. The permittees shall conduct construction site inspections for compliance with their ordinances (grading, Water Quality Management Plans, etc.), local permits (construction, grading, etc.). Inspections shall include a review of erosion control and BMP implementation plans and an evaluation of the effectiveness and maintenance of the BMPs identified. Inspection frequency will, at a minimum, include the following:

   a. During the wet season (i.e., October 1 through May 31 of each year), all high priority sites are to be inspected, in their entirety once a month. All medium priority sites are to be inspected at least twice during the wet season. All low priority sites are to be inspected at least once during the wet season. When BMPs or BMP maintenance is deemed inadequate or out of compliance, an inspection frequency of once every week will be maintained until BMPs and BMP maintenance are brought into compliance. During the 2001-2002 wet season, prior to the development of the inventory database, all construction sites must be visited at least twice. If a site is deemed out of compliance, an inspection frequency adequate to bring the site into compliance must be maintained.

   b. During the dry season (i.e., June 1 through September 30 of each year), all construction sites shall be inspected at a frequency sufficient to ensure that sediment and other pollutants are properly controlled and that unauthorized, non-storm water discharges are prevented.

   c. Information, including at a minimum, inspection dates, inspectors present and the results of the inspection must be maintained in the database identified in Item 1, above, or must be linked to that database. A copy of this database must be provided to the Regional Board with each annual report.

4. The permittees shall enforce their ordinances and permits at all construction sites as necessary to maintain compliance with this order. Sanctions for non-compliance must include: monetary penalties, bonding requirements and/or permit denial or revocation.

5. Within 24 hours of discovery, the permittees shall provide oral or email notification to the Santa Ana Regional Water Quality Control Board of non-compliant sites, within

their jurisdiction, that are determined to pose a threat to human health or the environment (e.g., sewage spills that could impact water contact recreation, an oil spill that could impact wild life, a hazardous substance spill where residents are evacuated, etc.). Following oral notification, a written report must be submitted to the Santa Ana Regional Water Quality Control Board within 10 days, detailing the nature of the non-compliance, any corrective action taken by the site owner, other relevant information (e.g., past history of non-compliance, environmental damage resulting from the non-compliance, site owner responsiveness) and the type of enforcement that will be carried out by the permittee. Further, incidences of non-compliance shall be recorded along with the information noted in the written report and the final outcome/enforcement for the incident in the database identified in Items 1 and 3c, above, or must be linked to these databases.

6. The inspectors responsible for ensuring compliance at construction sites shall be trained in and have an understanding of: federal, state and local water quality laws and regulations as they apply to construction and grading activities; the potential effects of construction and urbanization on water quality; and, implementation and maintenance of erosion control BMPs and sediment control BMPs and the applicable use of both. The permittees shall have adequately trained their inspection staff by November 15, 2002, and on an annual basis, prior to the rainy season, thereafter. Training programs should be coordinated with the Santa Ana Regional Water Quality Control Board and prior notification of training shall be provided to Regional Board staff. . New hires or transfers that will be performing construction inspections for the permittees must be trained within one month of starting inspection duties.
7. The permittees need not inspect facilities already inspected by Regional Board staff if the inspection was conducted within the specified time period.

IX. MUNICIPAL INSPECTIONS OF INDUSTRIAL FACILITIES

1. The permittees shall develop by July 1, 2003, an inventory of industrial facilities within their jurisdiction with business permits or other authorization by permittees that have the potential to discharge pollutants to the MS4. Facilities will be listed, regardless of whether the facility is subject to the California Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (General Industrial Permit), or other individual NPDES permit. This database must be updated on an annual basis. This inventory must be maintained in a computer-based database system and must include relevant information on ownership, Standard Industrial Classification (SIC) code(s), General Industrial Permit WDID # (if any), size, location, etc. Inclusion of a Geographical Information System (GIS) is recommended but not required.
2. To establish priorities for inspection requirements under this order, the permittees shall prioritize industrial facilities within their jurisdiction as a high, medium, or low threat to water quality. Evaluation of these facilities should be based on such factors as type of industrial activities (SIC codes), materials or wastes used or

stored outside, pollutant discharge potential, facility size, proximity and sensitivity of receiving waters and any other relevant factors. At a minimum, a high priority shall be assigned to: facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA); and facilities with a high potential for or history of unauthorized, non-storm water discharges.

3. The permittees shall conduct industrial facility inspections for compliance with its ordinances and permits. Inspections shall include a review of material and waste handling and storage practices, pollutant control BMP implementation and maintenance and evidence of past or present unauthorized, non-storm water discharges.
4. After July 1, 2003, all high priority sites are to be inspected at least once a year; all medium priority sites are to be inspected at least once, every two years; and all low priority sites are to be inspected at least once per permit cycle. In the event that inappropriate material or waste handling or storage practices are observed, or there is evidence of past or present unauthorized, non-storm water discharges, an inspection frequency adequate to bring the site into compliance must be maintained (at a minimum, once a month). Once compliance is achieved, a minimum inspection frequency of once every four months will be maintained for the next calendar year.
5. By July 1, 2005, the permittees shall identify the remaining industrial facilities that do not have business permits or other authorization by the permittees. These facilities shall be added to the database identified in Section IX.1 and shall be prioritized in accordance with the specifications identified in Section IX.2.
6. Information including, at a minimum, inspection dates, inspectors present and the results of the inspection must be maintained in the database identified in Item 1, above, or must be linked to that database. A copy of this database must be provided to the Regional Board with each annual report.
7. The permittees shall enforce their ordinances and permits at all industrial facilities as necessary to maintain compliance with this Order. Sanctions for non-compliance must include: monetary penalties, bonding requirements and/or permit denial or revocation.
8. Within 24 hours,of discovery, the permittees shall provide oral or email notification to the Santa Ana Regional Water Quality Control Board of non-compliant facilities, within their jurisdiction, that are determined to pose a threat to human health or the environment; (e.g., sewage spills that could impact water contact recreation, an oil spill that could impact wild life, a hazardous substance spill where residents are evacuated, etc.). Following oral notification, a written report must be submitted to the Santa Ana Regional Water Quality Control Board within 10 days, detailing the nature of the non-compliance, any corrective action taken by the site owner, other relevant information (e.g., past history of non-compliance, environmental damage resulting from the non-compliance, facility owner responsiveness) and the type of enforcement that will be carried out by the permittee. Further, incidences of non-

compliance shall be recorded along with the information noted in the written report and the final outcome/enforcement for the incident in the database identified in Section IX.1.

9. The inspectors responsible for ensuring compliance at industrial and commercial facilities shall be trained in and have an understanding of: federal, state and local water quality laws and regulations as they apply to industrial activities; the potential effects of industrial discharge and urbanization on water quality; and implementation and maintenance of pollutant control BMPs. The permittees shall have adequately trained their inspection staff by July 1, 2003, and on an annual basis thereafter. Training programs should be coordinated with the Santa Ana Regional Water Quality Control Board and prior notification of training shall be provided to Regional Board staff. New hires or transfers that will be performing industrial and commercial inspections for the permittees must be trained within one month of starting inspection duties.
10. The permittees need not inspect facilities already inspected by Regional Board staff if the inspection was conducted within the specified time period.

X. MUNICIPAL INSPECTIONS OF COMMERCIAL FACILITIES

1. The permittees shall develop by July 1, 2003, an inventory of the following commercial facilities/companies listed below within their jurisdiction. This database must be updated on an annual basis. This inventory must be maintained in a computer-based database system and must include relevant information on ownership, size, location, etc. Inclusion of a Geographical Information System (GIS) is recommended but not required.

    a. Automobile mechanical repair, maintenance, fueling, or cleaning;

    b. Automobile and other vehicle body repair or painting;

    c. Mobile automobile or other vehicle washing;

    d. Mobile carpet, drape or furniture cleaning;

    e. Mobile high pressure or steam cleaning;

    f. Painting and coating;

g. Nurseries and greenhouses;

h. Landscape and hardscape installation;

i. Pool, lake and fountain cleaning;

j. Other commercial sites/sources that the permittees determine may contribute a significant pollutant load to their MS4; and,

2. To establish priorities for inspection requirements under this Order, the permittees shall prioritize commercial facilities/companies within their jurisdiction as a high, medium, or low threat to water quality based on such factors as the type, magnitude, and location of the commercial activity, potential for discharge of pollutants to the MS4, and any history of unauthorized non-storm water discharges.

3. The permittees shall conduct commercial facility inspections for compliance with its ordinances and permits. Inspections shall include a review of material and waste handling and storage practices, pollutant control BMP implementation and maintenance, and evidence of past or present unauthorized, non-storm water discharges.

4. After July 1, 2003, the permittees shall establish inspection frequencies and priorities as determined by the threat to water quality prioritization described in X.2. In the event that inappropriate material or waste handling or storage practices are observed, or there is evidence of past or present unauthorized, non-storm water discharges, an inspection frequency adequate to bring the site into compliance must be maintained.

5. By July 1, 2004, all high priority sites shall have been inspected at least once.

6. Information including at a minimum, inspection dates, inspectors present and the results of the inspection must be maintained in the database identified in Item 1, above, or must be linked to that database. A copy of this database must be provided to the Regional Board with each annual report.

7. The permittees shall enforce their ordinances and permits at commercial facilities. Sanctions for non-compliance must include: monetary penalties, bonding requirements and/or permit denial or revocation.

8. Within 24 hours of dicovery, the permittees shall provide oral or email notification to the Santa Ana Regional Water Quality Control Board of non-compliant facilities, within their jurisdiction, that are determined to pose a threat to human health or the environment ; (e.g., sewage spills that could impact water contact recreation, an oil spill that could impact wild life, a hazardous substance spill where residents are evacuated, etc.). Following oral notification, a written report must be submitted to the Santa Ana Regional Water Quality Control Board within 5 days. For incidents that do not pose a threat to human or environmental health, the permittees shall submit a written report within 30 days of the incident. All written reports shall detail the nature of the non-compliance, identify any corrective action taken by the site owner, and note other relevant information (e.g., past history of non-compliance, environmental damage resulting from the non-compliance, facility owner responsiveness) and the type of enforcement that will be carried out by the permittees. Further, incidences of non- compliance shall be recorded along with the information noted in the written report and the final outcome/enforcement for the incident in the database identified in Section X.1.

9. The inspectors responsible for ensuring compliance at commercial facilities shall be trained in and have an understanding of: federal, state and local water quality laws and regulations as they apply to industrial and commercial activities; the potential effects of industrial discharge and urbanization on water quality; and, implementation and maintenance of pollutant control BMPs. The permittees shall have adequately trained their inspection staff by July 1, 2003 and on an annual basis thereafter. Training programs should be coordinated with the Santa Ana Regional Water Quality Control Board and prior notification of training shall be provided to Regional Board staff. New hires or transfers that will be performing commercial inspections for the permittees must be trained within one month of starting inspection duties.

10. The permittees need not inspect facilities already inspected by Regional Board staff if the inspection was conducted within the specified time period.

XI. SEWAGE SPILLS, INFILTRATION INTO MS4 SYSTEMS FROM LEAKING SANITARY SEWER LINES, SEPTIC SYSTEM FAILURES, AND PORTABLE TOILET DISCHARGES

1. By July 1, 2003, the principal permittee, in coordination with the local sewering agencies, shall propose a mechanism to determine and control the impact of infiltration from leaking sanitary sewer systems on storm water quality. At a minimum, these guidelines shall include a mechanism to address exfiltration from all sanitary sewer lines that are 24 inches or larger. The permittees shall provide 24hour access to local sanitation districts to the MS4s to address any sewage spills. The Executive Officer will request the local sewering agencies to work cooperatively with the permittees in developing these guidelines.

2. By July 1, 2003, the permittees, whose jurisdictions have 50 or more septic tank sub-surface disposal systems in use, shall identify with the appropriate governing agency a mechanism to determine the effect of septic system failures on storm water quality and a mechanism to address such failures.

3. The principal permittee shall collaborate with the local sewering agencies to develop a unified response mechanism to respond to any sewage spills that may have an impact on receiving water quality. The Executive Officer will request the local sewering agencies to take the lead and develop the unified response guidance, by no later than July 1, 2003, in cooperation with the principal permittee.

4. By July 1, 2003, the principal permittee shall review the permittees' current oversight programs for portable toilets to determine the need for any revision.

XII. NEW DEVELOPMENT (INCLUDING SIGNIFICANT RE-DEVELOPMENT)

A. GENERAL REQUIREMENTS

1. By July 1, 2002, the permittees shall establish a mechanism to ensure (prior to issuance of any local permits or other approvals) that all construction projects and industrial facilities that are required to obtain coverage under the State's General Storm Water Permits have filed with the State Board a Notice of Intent to be covered by the relevant General Permit. Applicants shall be required to provide a copy of the Waste Discharger Identification Number (WDID) issued by the State Board as evidence of coverage under the General Permit.

2. By July 1, 2002, the permittees shall review and modify the approval process for building, grading, and similar permits to include incorporation of BMPs as provided in the Guidelines for New Development and Redevelopment.

3. The permittees shall review and revise the storm water management program and implement any changes in the program, as necessary, in order to require construction site dischargers to reduce pollutants in runoff from construction sites during all construction phases. At a minimum, the program shall address:

a) Pollution prevention measures and public education

b) Grading Ordinance and any other local requirements

c) Verification of coverage under the State's General Permit

d) Procedures for reporting non-compliance

e) Procedures for review and approval of WQMP.

The permittees shall require applicants to prepare a WQMP in accordance with Appendix B of the ROWD and to incorporate identified structural and non-structural BMPs into the development.

4. The permittees shall review and revise the storm water management program and implement any changes in the program, as necessary in order to require industrial site dischargers to reduce pollutants in runoff from new and existing industrial sites. At a minimum this program shall address:

   a. Pollution prevention measures and public education

   b. Source identification

   c. Monitoring and inspection of industrial sites

   d. Verification of coverage under the State's General Permit

   e. Enforcement of local ordinances and other requirements for industrial sites

   f. Reporting of non-compliance.

The permittees shall require applicants to prepare a WQMP in accordance with Appendix B of the ROWD and incorporate identified structural and non-structural BMPs into the development.

5. The permittees shall minimize the short and long-term impacts on receiving water quality from new developments and re-developments within its jurisdiction as required in Section B.1. below. In order to reduce pollutants and runoff flows from new developments and re-developments to the maximum extent practicable, permittees shall at a minimum:

   a) Revise General Plan/CEQA Processes to address storm water issues

   b) Review and modify project approval process

   c) Conduct public and business education.

6. Within 120 days of the issuance of this order, the permittees shall review their planning procedures and CEQA document preparation processes to ensure that storm water-related issues are properly considered and addressed. If necessary, these processes should be revised to consider and mitigate impacts to storm water quality . These changes may include revising the General Plan, modifying the project approval processes, including a section on urban runoff related water quality issues in the CEQA checklist, and

conducting training for project proponents. The results of the review and actions taken by the permittees shall be reported to the Regional Board in the annual report for the corresponding year the review is completed. All actions found necessary shall be completed within a year of issuance of this order. The following potential impacts shall be considered during CEQA review:

a. Potential impact of project construction on storm water runoff.

b. Potential impact of project's post-construction activity on storm water runoff.

c. Potential for discharge of storm water pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas.

d. Potential for discharge of storm water to affect the beneficial uses of the receiving waters.

e. Potential for significant changes in the flow velocity or volume of storm water runoff to cause environmental harm.

f. Potential for significant increases in erosion of the project site or surrounding areas.

7. By July 1, 2004, the permittees shouldl incorporate watershed protection principles and policies into the General Plan or related documents (such as Development Standards, Zoning Codes, Conditions of Approval, Development Project Guidance) and provide proof of such action in the 2004 annual report. These principles and policies shall include the following considerations:

a) Limit disturbance of natural water bodies and drainage systems; conserve natural areas; protect slopes and channels; minimize impacts from storm water and urban runoff on the biological integrity of natural drainage systems and water bodies;

b) Minimize changes in hydrology and pollutant loading; require incorporation of controls including structural and non-structural BMPs to mitigate any projected increases in pollutant loads and flows; ensure that post-development runoff rates and velocities from a site do not adversely impact downstream erosion, stream habitat; minimize the quantity of storm water directed to impermeable surfaces and the MS4s; maximize the percentage of permeable surfaces to allow more percolation of storm water into the ground;

c) Preserve wetlands, riparian corridors, and buffer zones; establish reasonable limits on the clearing of vegetation from the project site;

d) Encourage the use of water quality wetlands, biofiltration swales, watershed-scale retrofits, etc., where such measures are likely to be

effective and technically and economically feasible;

e) Provide for appropriate permanent measures to reduce storm water pollutant loads in storm water from the development site; and

f) Establish development guidelines for areas particularly susceptible to erosion and sediment loss.

8. Each permittee shall provide the Regional Board with the draft amendment or revision when a pertinent General Plan element or the General Plan is noticed for comment in accordance with Government Code Section 65350 et seq.

9. By July 1, 2002, the permittees shall review their current grading/erosion control ordinances to determine the need for any revision.

10. The permittees shall, through conditions of approval, ensure proper maintenance and operation of any permanent flood control structures installed in new developments. The parties responsible for the maintenance and operation of the facilities, and a funding mechanism for operation and maintenance shall be identified prior to approval of the project.

11. By July 1, 2003, the principal permittee shall identify a new development site to evaluate the effectiveness of a selected BMP. A proposal for this study shall be included in the 2003 annual report including details of the project site, the BMP selected for the study, and a proposed schedule to complete the study.

    The permittees shall continue to implement BMPs for new development and for public works construction.

12. July 1, 2003, the permittees shall review their Guidelines for New Development and Redevelopment to determine the need for any revisions.

B. WATER QUALITY MANAGEMENT PLAN (WQMP) FOR URBAN RUNOFF (FOR NEW DEVELOPMENT/SIGNIFICANT RE-DEVELOPMENT)

1. By July 1, 2003, the permittees shall review their existing BMPs for new developments to determine the need for developing any additional WQMPs for urban runoff from new developments/significant re-developments for the type of projects listed below. Significant re-development is defined as the addition of 5,000 or more square feet of impervious surface on an already developed site. This includes additional buildings and/or structures, extension of existing footprint of a building, construction of parking lots, etc.

    a) All significant re-development projects.

    b) Home subdivisions of 10 units or more. This includes single family residences, multi-family residence, condominiums, apartments, etc.

    c) Commercial developments of 100,000 square feet or more. This includes non-residential developments such as hospitals, educational institutions, recreational facilities, mini-malls, hotels, office buildings, warehouses, and light industrial facilities.

d) Automotive repair shops (with SIC codes 5013, 5014, 5541, 7532-7534, 7536-7539).

e) Restaurants where the land area of development is 5,000 square feet or more.

f) Hillside developments of 10,000 square feet or more which are located on areas with known erosive soil conditions or where the natural slope is twenty-five percent or more.

g) Developments of 2,500 square feet of impervious surface or more adjacent to (within 200 feet) or discharging directly into environmentally sensitive areas such as areas designated in the Ocean Plan as areas of special biological significance or waterbodies listed on the CWA Section 303(d) list of impaired waters.

h) Parking lots of 5,000 square feet or more exposed to storm water. Parking lot is defined as land area or facility for the temporary storage of motor vehicles.

2. The permittees are encouraged to include in the WQMP the development and implementation of regional and/or watershed management programs that address runoff from new development and significant re-development. The WQMP shall include BMPs for source control, pollution prevention, and/or structural treatment BMPs. For all structural treatment controls, the WQMP shall identify the responsible party for maintenance of the treatment systems, and a funding source or sources for its operation and maintenance. The goal of the WQMP is to develop and implement programs and policies to minimize the effects of urbanization on site hydrology, urban runoff flow rates or velocities and pollutant loads. This goal may be achieved through watershed-based structural treatment controls, in combination with site-specific BMPs. The WQMP shall reflect consideration of the following goals, which may be addressed through on-site and/or watershed based BMPs.

   a. The pollutants in post-development runoff shall be reduced using controls that utilize best available technology (BAT) and best conventional technology (BCT).

   b. The discharge of any listed pollutant to an impaired waterbody on the 303(d) list shall not cause an exceedance of receiving water quality objectives.

3. Pending revision of the WQMP requirements, the permittees shall implement their proposed program detailed in Section 4 of the ROWD. If the Executive Officer does not approve the revised WQMP by October 1, 2003, as meeting the goals proposed in XII.B.2, above and providing an equivalent or superior degree of treatment as the sized criteria outlined in XII.B.3, below, structural BMPs shall be required for all new development and significant redevelopment. Minimum structural BMPs must either be sized to comply

with one of the following numeric sizing criteria or be deemed by the Principal Permittee to provide equivalent or superior treatment, either on a site basis or a watershed basis:

Volume

Volume–based BMPs shall be designed to infiltrate or treat either:

1. The volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the local historical rainfall record; or
2. The volume of annual runoff produced by the 85th percentile 24-hour rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87 (1998); or
3. The volume of annual runoff based on unit basin storage volume, to achieve 80% or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/commercial (1993); or
4. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event;

OR

Flow

Flow-based BMPs shall be designed to infiltrate or treat either:

1. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour; or
2. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or
3. The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

C. Groundwater Protection

Any structural infiltration BMPs shall meet the following minimum requirements:

1. Use of structural infiltration treatment BMPs shall not cause or contribute to an exceedance of groundwater water quality objectives.

2. Source control and pollution prevention control BMPs shall be implemented to protect groundwater quality.
3. Structural infiltration treatment BMPs shall not be used in industrial or high vehicular traffic areas (25,000 or greater average daily traffic).
4. Structural infiltration treatment BMPs shall be located at least 100 feet horizontally from any water supply wells.
5. Structural infiltration treatment BMPs shall not cause a nuisance or pollution as defined in Water Code Section 13050.

6. The permittees may propose any equivalent sizing criteria for treatment BMPs or other controls that will achieve greater or substantially similar pollution control benefits. In the absence of approved equivalent sizing criteria, the permittees shall implement the above stated sizing criteria.

7. If a particular BMP is not technically feasible, other BMPs should be implemented to achieve the same level of compliance or if the cost of BMP implementation greatly outweighs the pollution control benefits, the permittees may grant a waiver of the numeric sizing criteria. All waiver, along with waiver justification documentation must be reported to the Regional Board in writing within 30 days. The permittees may propose to establish an urban runoff fund to be used for urban water quality improvement projects within the same watershed that is funded by contributions from developers granted waivers. If it is determined by the Regional Board that waivers are being inappropriately granted, this order may be reopened to modify these waiver conditions.

8. The obligation to install minimum structural BMPs at new development is met if, for a common scheme of development, BMPs are constructed with the requisite capacity to serve the entire common scheme, even if certain phases of the common scheme may not have BMP capacity located on that phase in accordance with the requirements specified above.

XIII. PUBLIC EDUCATION AND OUTREACH

1. The permittees shall continue to implement the public education efforts already underway and shall implement all elements of the comprehensive public and business education strategy contained in the Report of Waste Discharge. By July 1, 2002, the permittees shall complete a public awareness survey to determine the effectiveness of the current public and business education strategy.
2. When feasible, the permittees shall participate in joint outreach with other programs including, but not limited to, the State of California Storm Water Quality Task Force, Caltrans, and other municipal storm water programs to ensure that a consistent message on storm water pollution prevention is disseminated to the

public. The permittees shall sponsor or staff a storm water table or booth at community, regional, and/or countywide events to distribute public education materials to the public. Each permittee shall participate in at least one event per year.

3. By December 1, 2002, the Management Committee shall make recommendations for any changes to the public and business education program. The goal of the public and business education program shall be to target 100% of the residents including businesses, commercial and industrial establishments. The Committee shall ensure implementation of BMPs listed in ROWD (Appendix C) for restaurants, automotive service centers, gasoline service stations and other similar facilities. The permittees shall distribute these BMP brochures to these facilities during inspections and/or through other means.
4. Within six months of adoption of this order, the permittees shall develop public education materials to encourage the public to report (including a hotline telephone number to report) illegal dumping from residential, industrial, construction and commercial sites into public streets, storm drains and other waterbodies, clogged storm drains, faded or missing catch basin stencils and general storm water and BMP information. This hotline and website shall be included in the public and business education program and shall be listed in the governmental pages of all regional phone books.
5. By July 1, 2003, the permittees shall develop BMP guidelines for the control of those potentially polluting activities not otherwise regulated by any agency including guidelines for the household use of fertilizers, pesticides, herbicides, and other chemicals, guidelines for mobile vehicle maintenance activities, carpet cleaners, commercial landscape maintenance, and pavement cutting. These guidelines shall be distributed to the public, trade associations, etc., through participation in community events, trade association meetings, and/or mail.

XIV. MUNICIPAL FACILITIES/ACTIVITIES

1. Each permittee shall adopt the performance goals and implement the commitments included under Section 5.5 of the ROWD to ensure that public agency facilities and activities do not cause or contribute to a pollution or nuisance in receiving waters.
2. By July 1, 2003, the permittees shall complete an assessment of their flood control facilities to evaluate opportunities to configure and/or to reconfigure channel segments to function as pollution control devices and to optimize beneficial uses. These modifications may include in-channel sediment basins, bank stabilization, water treatment wetlands, etc. This shall be reported in the 2003 annual report.
3. By July 1, 2002, the Management Committee shall develop and distribute to all permittees a BMP fact sheet to address public agency activities such as road construction and maintenance, street sweeping, catch basin stenciling, drainage

facility cleaning and maintenance, etc. This shall be reported in the 2002 annual report.

4. By July 1, 2002, the Management Committee shall develop and distribute BMP guidelines for public agency and contract field operations and maintenance staff. These guidelines shall describe appropriate pollution control measures, appropriate response to spills and illegal discharges, etc. Contractor training requirements shall be included in new contracts and contracts that come up for renewal. This shall be reported in the 2002 annual report.
5. At least on an annual basis, each permittee shall provide training to public agency staff and to contract field operations staff on fertilizer and pesticide management, model maintenance procedures, and implementation of other pollution control measures. Each permittee shall designate key staff involved in public agency activities to attend at least three such training sessions during the five-year term of this permit.
6. By July 1, 2003, the Management Committee shall evaluate the efficiency and cost effectiveness of the available BMPs for litter control and develop recommendations for any needed improvements. This shall be reported in the 2003 annual report.
7. Each permittee shall identify areas that are not subject to street sweeping due to lack of continuous curb and gutter, and evaluate their potential for impacting storm water quality. Appropriate BMPs shall be implemented where significant water quality impact is identified. This shall be reported in the 2003 annual report.
8. Each permittee shall inspect all of their inlets, open channels, and basins at least once during each reporting year and maintain at least 80% of its drainage facilities on an annual basis, with 100% of the facilities included in a two-year period, using the BMP fact sheet developed by the Management Committee. The inspection and maintenance frequency for all or portions of the drainage facilities shall be evaluated annually to determine the need for increasing the inspection and maintenance frequency. These information shall be included in the annual report.
9. Each permittee will clean those drainage facilities where the inspection reveals that the sediment/storage volume is 25% full, or where there is evidence of illegal discharge or if accumulated sediment or debris impairs the hydraulic capacity of the facility.

XV. MUNICIPAL CONSTRUCTION PROJECTS/ACTIVITIES

1. This order authorizes the discharge of storm water runoff from construction projects that may result in land disturbance of five (5) acres or more (or less than five acres, if it is part of a larger common plan of development or sale which is five acres or more) that are under ownership and/or direct responsibility of any of the permittees.

2. Prior to commencement of construction activities, the permittees shall notify the Executive Officer of the Regional Board of the proposed construction project. Upon completion of the construction project, the Executive Officer shall be notified of the completion of the project.
3. The permittees shall develop and implement a storm water pollution prevention plan (SWPPP) and a monitoring program that is specific for the construction project prior to the commencement of any of the construction activities. The SWPPP shall be kept at the construction site and released to the public and/or Regional Board staff upon request.
4. The SWPPP and the monitoring program for the construction projects shall be consistent with the requirements of the latest version of the State's General Construction Activity Storm Water Permit.
5. The permittees shall give advance notice to the Executive Officer of the Regional Board of any planned changes in the construction activity, which may result in non-compliance with the latest version of the State's General Construction Activity Storm Water Permit.
6. All other terms and conditions of the latest version of the State's General Construction Activity Storm Water Permit shall be applicable.

XVI. PROGRAM MANAGEMENT

By October 1 of each year, the permittees shall evaluate MSWMP to determine the need for any revisions. At a minimum, the first annual review after adoption of this order shall include:

1. A description of any additional formal training needs for municipal employees.
2. A description of the need for additional coordination meeting/training for the designated NPDES inspectors.
3. The annual report shall include the findings of this review and a schedule for any needed revisions.
4. The Management Committee will continue to meet at least 11 times a year to discuss issues related to permit implementation and regional and statewide issues. Each permittee’s designated representative or a designated alternate should attend not less than 9 out of 11 meetings.

XVII. FISCAL RESOURCES

The permittees shall provide adequate funding for administration, implementation and enforcement of the areawide storm water management program elements and local storm water programs. The permittees shall prepare and submit a unified fiscal analysis to the Executive Officer of the Regional Board. The fiscal analysis shall be submitted with the Annual Report document no later than November 15th of each year and shall, at a minimum, include the following:

1. Each permittee's expenditures for the previous fiscal year,
2. Each permittee's budget for the current fiscal year,
3. A description of the source of funds, and
4. Each permittee's estimated budget for the next fiscal year.

XVIII. PROVISIONS

GENERAL

1. The purpose of this Order is to require the implementation of best management practices to reduce, to the maximum extent practicable, the discharge of pollutants from the MS4 in order to support reasonable further progress towards attainment of water quality objectives.

   Permittees shall demonstrate compliance with all the requirements in this order and specifically with Section III. Discharge Limitations and Section IV. Receiving Water Limitations, through timely implementation of their Report of Waste Discharge (ROWD) and any approved modifications, revisions, or amendments developed pursuant to this order. The ROWD is hereby made an enforceable component of this order.

2. Certain BMPs implemented or required by the permittees for urban runoff management may create habitat for vectors (e.g., mosquitoes and rodents) if not property designed and maintained. Close collaboration and cooperative effort between the permittees and local vector control agencies and the State Department of Health Services during the development and implementation of urban runoff management programs are necessary to minimize potential vector habitat and public health impacts resulting from vector breeding. Nothing in this permit is intended to prohibit inspection or abatement of vectors by the State or local Vector Control agencies in accordance with the Health and Safety Code.

3. The permittees shall implement all elements of the ROWD. Where the dates are different from the corresponding dates in this order, the dates in this order shall prevail. Any proposed revisions to the ROWD shall be submitted with the Annual Report to the Executive Officer of the Regional Board for review and approval. All approved revisions to the ROWD shall be implemented as per the time schedules approved by the Executive Officer.

4. The permittees shall comply with Monitoring and Reporting Program No. 01-16 and any revisions thereto, which are hereby made a part of this order. The Executive Officer is hereby authorized to revise the Monitoring and Reporting Program in a manner consistent with this order, and to allow the permittees to participate in regional, statewide, national or other monitoring programs in lieu of or in addition to Monitoring and Reporting Program No. 01-16.

5. Upon approval by the Executive Officer of the Regional Board, all plans, reports and subsequent amendments required by this order shall be implemented and

shall become an enforceable part of this order. Prior to approval by the Executive Officer, these plans, reports and amendments shall not be considered as an enforceable part of this order.

6. The permittees shall report to the Executive Officer of the Regional Board:

   a. Any enforcement actions and discharges of storm or non-storm water, known to the permittees, which may have an impact on human health or the environment, and

   b. Any suspected or reported activities on federal, state, or other entity's land or facilities, where the permittees do not have any jurisdiction, and where the suspected or reported activities may be contributing pollutants to waters of the US.

7. The permittees shall immediately report any discharge that may endanger human health or the environment including any unauthorized discharge to the Executive Officer or his designee (909-782-3238, or by e-mail to: sw@rb8.swrcb.ca.gov) and to the Office of Emergency Services (1-800-852-7550). This reporting should be done by phone or e-mail as soon as the permittees become aware of the circumstances. A written report of the discharge or incident shall be submitted to the Executive Officer within five days.

8. The permittees shall not issue occupancy permits unless the applicant is informed of his obligation under the State's General Industrial Activities Storm Water Permit. The permittees shall not issue any grading permit for construction activities which will disturb five acres or more (or less than five acres, if it is part of a larger common plan of development or sale which is five acres or more or when Phase II requirements become effective) until proof of coverage with the State's General Construction Activity Storm Water Permit is verified. The proof of coverage may include a letter from the Regional Board office, a copy of the Notice of Intent, Waste Discharger Identification number, etc.

9. Permit application and special NPDES program requirements contained in 40 CFR 122.21 (a), (b), (d)(2), (f), (p); 122.41 (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l); and 122.42 (c) are incorporated into this order by reference.

XIX. PERMIT EXPIRATION AND RENEWAL

1. This order expires on February 1, 2007 and the permittees must file a Report of Waste Discharge (permit application) no later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements. The Report of Waste Discharge shall, at a minimum, include the following:

   a) Any revisions to the Report of Waste Discharge including, but not limited to, all the activities the permittees propose to undertake during the next permit term, goals and objectives of such activities, an evaluation of the need for additional source control and/or structural BMPs, any proposed pilot studies, etc.;

b) Changes in land use and/or population including map updates;

c) Any significant changes to the storm drain systems, outfalls, detention or retention basins or dams, and other controls including map updates of the storm drain systems; and

d) Any new or revised program elements and compliance schedule(s) necessary to comply with Section IV of this order.

2. This order may be modified, revoked or reissued prior to its expiration date for the following reasons:

   a) To address significant changes in conditions identified in the technical reports required by the Regional Board which were unknown at the time of the issuance of this order;

   b) To incorporate applicable requirements of statewide water quality control plans adopted by the State Water Resources Control Board or any amendments to the Basin Plan approved by the Regional Board, the State Board, and, if necessary, by the Office of Administrative Law;

   c) To comply with any applicable requirements, guidelines, or regulations issued or approved under the Clean Water Act, if the requirements, guidelines, or regulations contain different conditions or additional requirements than those included in this order; or

   d) To incorporate any requirements imposed upon the permittees through the TMDL process.

3. This order shall serve as a National Pollutant Discharge Elimination System (NPDES) Permit pursuant to Section 402 (p) of the Clean Water Act, or amendments thereto, and shall become effective ten days after the date of its adoption provided the Regional Administrator of the U. S. EPA has no objections. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

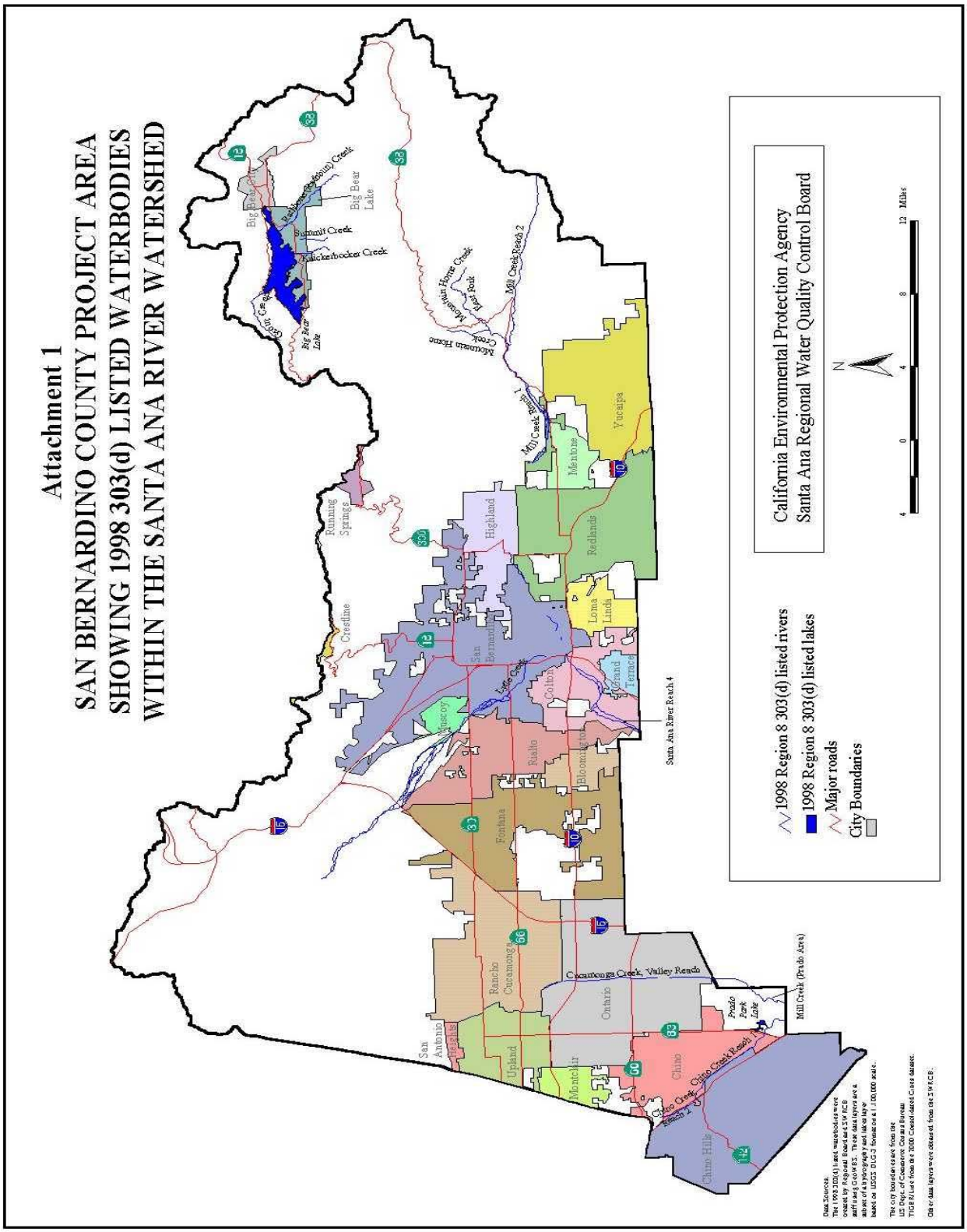
4. Order No. 96-32 is hereby rescinded.

I, Gerard Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on …….

_____

Gerard J. Thibeault

Executive Officer


Attachment 1
SAN BERNARDINO COUNTY PROJECT AREA
SHOWING 1998 303(d) LISTED WATERBODIES
WITHIN THE SANTA ANA RIVER WATERSHED
California Environmental Protection Agency
Santa Ana Regional Water Quality Control Board
1998 Region 8 303(d) listed rivers
1998 Region 8 303(d) listed lakes
Major roads
City Boundaries
N
0
4
8
12 Miles
Big Bear Lake
Summit Creek
Knickerbocker Creek
Mill Creek Reach 2
Mill Creek Reach 1
Yucaipa
Redlands
Highland
Running Springs
Crestline
San Bernardino
Loma Linda
Grand Terrace
Colton
Rialto
Bloomington
Fontana
Rancho Cucamonga
Ontario
Chino
Chino Hills
Upland
Montclair
San Antonio Heights
Cucamonga Creek, Valley Reach
Mill Creek (Prado Area)
Prado Park Lake
Chino Creek Reach 3
Chino Creek Reach 2
Santa Ana River Reach 4
Lytle Creek

Attachment 2

Inland Surface Streams

A. Santa Ana River

Santa Ana River, Reaches 4, 5, and 6

B. San Bernardino Mountain Streams

Mill Creek Drainage

Mill Creek, Reaches 1 and 2

Mountain Home Creek

Mountain Home Creek, East Fork

Monkey Face Creek

Alger Creek

Falls Creek

Vivian Creek

High Creek

Other Tributaries: Lost, Oak Cove, Green, Skinner, Momyer and Glen Martin Creeks, and other Tributaries to these Creeks

Bear Creek Drainage

Bear Creek

Siberia Creek

Slide Creek

All Other Tributaries to these Creeks

Big Bear Lake Tributaries

North Creek

Metcalf Creek

Grout Creek

Rathbone (Rathbun) Creek

Other Tributaries to Big Bear Lake: Johnson, Minnelusa, Polique, and Red Ant Creeks, and other Tributaries to these Creeks

Baldwin Lake Drainage

Shay Creek

Other Tributaries to Baldwin Lake: Sawmill, Green, and Caribou Canyons and other Tributaries to these Creeks.

C. Other Streams Draining to Santa Ana River (Mountain Reaches)

Cajon Creek

City Creek

Devil Canyon Creek

East Twin and Strawberry Creeks

Waterman Canyon Creek

Fish Creek

Forsee Creek

Plunge Creek

Barton Creek

Bailey Canyon Creek

Kimbark Canyon, East Fork Kimbark Canyon, Ames Canyon and West Fork Cable Canyon Creeks

Valley Reaches of Above Streams

Other Tributaries (Mountain Reach): Alder, Badger Canyon, Bledsoe Gulch, Borea Canyon, Breakneck, Cable Canyon, Cienega Seca, Cold, Converse, Coon, Crystal, Deer, Elder, Fredalba, Frog, Government, Hamilton, Heart Bar, Hemlock, Keller, Kilpecker, Little Mill, Little Sand Canyon, Lost, Meyer Canyon, Mile, Monroe Canyon, Oak, Rattlesnake, Round Cienega, Sand, Schneider, Staircase, Warm Springs Canyon and Wild Horse Creeks, and other tributary to these Creeks.

D. San Gabriel Mountain Streams (Mountain Reaches)

San Antonio Creek

Lytle Creek (South, Middle, and North Forks) and Coldwater Canyon Creek

Day and East Etiwanda Creeks

Valley Reaches of Above Streams

Cucamonga Creek (Mountain Reach)

Cucamonga Creek (Valley Reach)

Other Tributaries (Mountain Reaches): San Sevaine, Deer, Duncan Canyon, Henderson Canyon, Stoddard Canyon, Icehouse Canyon, Cascade Canyon, Cedar, Falling Rock, Kerkhoff and Cherry Creeks, and other Tributaries to these Creeks.

E. San Timoteo Area Streams

San Timoteo Creek, Reaches 1 and 2

Oak Glen, Potato Canyon and Birch Creeks

Yucaipa Creek

F. Prado Area Streams

Chino Creek

G. Lake and Reservoirs

Baldwin Lake

Big Bear Lake

Jenks Lake

Attachment 3

LIST OF OTHER ENTITIES WITH THE POTENTIAL TO DISCHARGE POLLUTANTS TO THE SAN BERNARDINO COUNTY STORM WATER CONVEYANCE SYSTEM

Government Agencies

U.S. Army Corps of Engineers

U.S. Department of Agriculture - Forest Services, San Bernardino County National Forest

California Department of Transportation (Cal Trans)

California Department of Parks and Recreation - Chino Hills State Park

Inland Valley Development Agency, San Bernardino International Trade Center and Airport

Hospitals

Bear Valley Community Hospital

Chino Community Hospital

Doctors Hospital

Kaiser Foundation Hospital

Loma Linda Community Hospital

Loma Linda University Medical Center

Mountains Community Hospital

Ontario Community Hospital

Patton State Hospital

U.S. Department of Veterans Affair - Jerry L. Pettis Memorial Veterans Medical Center

Redlands Community Hospital

St. Bernardino Medical Center

San Antonio Community Hospital

San Bernardino Community Hospital

San Bernardino County Hospital

Railroads

AT&SF Railway Company

Southern Pacific Railroad Company

School Districts

Alta Loma Elementary School District

Bear Valley Unified School District

Central Elementary School District

Chaffey Joint Union High School District

Chino Valley Unified School District

Colton Joint Unified School District

Cucamonga Elementary School District

Etiwanda Elementary School District

Fontana Unified School District

Mountain View Elementary School District

Mt. Baldy joint Elementary School District

Ontario-Montclair Elementary School District

Rialto Unified School District

Rim of the World Unified School District

Redlands Unified School District

San Bernardino City Unified School District

Upland Unified School District

Yucaipa Joint Unified School District

Universities and Colleges

California State University - California State University San Bernardino

San Bernardino Community College District - Chaffey College Campus

San Bernardino Community College District - Crafton Hills College Campus

San Bernardino Community College District - San Bernardino Valley College Campus

University of Redlands

Loma Linda University

Water Districts

Big Bear Municipal Water District

Inland Empire Utilities Agency

Cucamonga County Water District

East Valley Water District

Monte Vista Water District

San Bernardino Valley Municipal Water District

West San Bernardino County Water District

Yucaipa Valley Water District

Transportation

Omnitrans

Metrolink (Fontana, Montclair, Ontario, Rancho Cucamonga, Rialto, San Bernardino)

Redlands Municipal Airport

Rialto Municipal Airport

Chino Airport

Cable Airport

Other Potential Dischargers

United States Postal Service

California National Guard

ATTACHMENT 4

GLOSSARY

Beneficial Uses - The uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals. "Beneficial Uses" of the waters of the State that may be protected against include, but are not limited to: domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or ground water on or after November 28, 1975; and potential beneficial uses are uses that would probably develop in future years through the implementation of various control measures. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code Section 13050(f)].

Best Available Technology (BAT) – BAT is the acronym for best available technology economically achievable. BAT is the technology-based standard established by congress in CWA section 402(p)(3)(A) for industrial dischargers of storm water. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of treatment and best management practices, or BMPs. For example, secondary treatment (or the removal of 85% suspended solids and BOD) is the BAT for suspended solid and BOD removal from a sewage treatment plant. BAT generally emphasizes treatment methods first and pollution prevention and source control BMPs secondarily.

The best economically achievable technology that will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Environmental Protection Agency Administrator. Factors relating to the assessment of best available technology shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the permitting authority deems appropriate.

Best Conventional Technology (BCT) – BCT is an acronym for Best Conventional Technology. BCT is the treatment techniques, processes and procedure innovations, and operating methods that eliminate or reduce chemical, physical, and biological pollutant constituents.

Best Management Practices - Best Management Practices (BMPs) are defined in 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the case of municipal storm water

permits, BMPs are typically used in place of numeric effluent limits.

Bioaccumulate - The progressive accumulation of contaminants in the tissues of organisms through any route including respiration, ingestion, or direct contact with contaminated water, sediment, pore water, or dredged material to a higher concentration than in the surrounding environment. Bioaccumulation occurs with exposure and is independent of the tropic level.

Bioassessment - The use of biological community information to evaluate the biological integrity of a water body and its watershed. With respect to aquatic ecosystems, bioassessment is the collection and analysis of samples of the benthic macroinvertebrate community together with physical/habitat quality measurements associated with the sampling site and the watershed to evaluate the biological condition (i.e. biological integrity) of a water body.

Bioconcentration – A process by which there is a net accumulation of a chemical directly from water into aquatic organisms resulting from simultaneous uptake and elimination by gill or epithelial tissue. Bioconcentration differs from bioaccumulation in that bioaccumulation refers to the progressive concentration of contaminants in the tissues of organisms through multiple pathways.

Biocriteria - Under the Clean Water Act, numerical values or narrative expressions that define a desired biological condition for a water body that are legally enforceable. The U.S. EPA defines biocriteria as: “numerical values or narrative expressions that describe the reference biological integrity of aquatic communities inhabiting waters of a given designated aquatic life use…(that)…describe the characteristics of water body segments least impaired by human activities.”

Biological Integrity - Defined in Karr J.R. and D.R. Dudley. 1981. Ecological perspective on water quality goals. Environmental Management 5:55-68 as: “A balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitat of the region.” Also referred to as ecosystem health.

Biomagnication – The transfer and progressive increase in tissue concentrations of a contaminant along the food chain. Because some pollutants can be transferred to higher trophic levels, carnivores at the top of the food chain, such as predatory fish, birds, and mammals (including humans), obtain most of their pollution burden from aquatic ecosystems by ingestion. Thus, although such pollutants may only be present in receiving waters in low concentrations, they can have a significant impact to the integrity of the ecosystem through biomagnification.

Clean Water Act Section 402(p) - [33 USC 1342(p)] is the federal statute requiring municipal and industrial dischargers to obtain NPDES permits for their discharges of storm water.

Clean Water Act Section 303(d) Listed Water Body - is an impaired water body in

which water quality does not meet applicable water quality standards and/or is not expected to meet water quality standards, even after the application of technology-based pollution controls required by the CWA. The discharge of urban runoff to these water bodies by the Co-permittees is significant because these discharges can cause or contribute to violations of applicable water quality standards.

Contamination - As defined in the Porter-Cologne Water Quality Control Act, contamination is "an impairment of the quality of waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease." 'Contamination' includes any equivalent effect resulting from the disposal of waste whether or not waters of the state are affected.

Debris – Debris is defined as the remains of anything destroyed or broken, or accumulated loose fragments of rock.

Designated Waste - Designated waste is defined as a "nonhazardous waste which consists of pollutants which, under ambient environmental conditions at the waste management unit, could be released at concentrations in excess of applicable water quality objectives, or which could cause degradation of waters of the state." [CCR Title 27, Chapter 3, Subchapter 2, Article 2, Section 20210; WC Section 13173]

Effluent Limitations - Limitations on the volume of each waste discharge, and the quantity and concentrations of pollutants in the discharge. The limitations are designed to ensure that the discharge does not cause water quality objectives to be exceeded in the receiving water and does not adversely affect beneficial uses.

Effluent limitations are limitations of the quantity and concentrations of pollutants in a discharge. The limitations are designed to ensure that the discharge does not cause water quality objectives to be exceeded in the receiving water and does not adversely affect beneficial uses. In other words, an effluent limit is the maximum concentration of a pollutant that a discharge can contain. To meet effluent limitations, the effluent typically must undergo one or more forms of treatment to remove pollutants in order to lower the pollutant concentration below the limit. Effluent limits are typically numeric (e.g., 10 mg/l).

Erosion – When land is diminished or wane away due to wind, water, or glacial ice. Often the eroded debris (silt or sediment) becomes a pollutant via storm water runoff. Erosion occurs naturally but can be intensified by land clearing activities such as farming, development, road building, and timber harvesting.

Grading - The cutting and/or filling of the land surface to a desired slope or elevation.

Hazardous Waste - Hazardous waste is defined as "any waste which, under Section 600 of Title 22 of the California Code of Regulations, is required to be managed according to Chapter 30 of Division 4.5 of Title 22 of this code." [CCR Title 22, Division 4.5, Chapter 11, Article 1]

Illicit Discharge - Any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to an NPDES permit

(other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

Inert Waste - Inert waste is defined as any waste that "does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste." [CCR Title 27, Chapter 3, Subchapter 2, Article 2, Section 20230]

MEP – MEP is the acronym for Maximum Extent Practicable. MEP is the technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) that municipal dischargers of storm water (MS4s) must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of treatment and best management practices (BMPs). MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional line of defense). MEP considers economics and is generally, but not necessarily, less stringent than BAT. A definition for MEP is not provided either in the statute or in the regulations. Instead the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their Water Quality Management Plan. Their total collective and individual activities conducted pursuant to the Water Quality Management Plan becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for municipal separate storm sewer system maintenance). In the absence of a proposal acceptable to the SARWQCB, the SARWQCB defines MEP.
In a memo dated February 11, 1993, entitled "Definition of Maximum Extent Practicable," Elizabeth Jennings, Senior Staff Counsel, SWRCB addressed the achievement of the MEP standard as follows:

"*To achieve the MEP standard, municipalities must employ whatever Best Management Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive. In selecting BMPs to achieve the MEP standard, the following factors may be useful to consider:*

a. Effectiveness: Will the BMPs address a pollutant (or pollutant source) of concern?

b. Regulatory Compliance: Is the BMP in compliance with storm water regulations as well as other environmental regulations?

c. Public Acceptance: Does the BMP have public support?

d. Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?

e. Technical Feasibility: Is the BMP technically feasible considering soils,

geography, water resources, etc?

The final determination regarding whether a municipality has reduced pollutants to the maximum extent practicable can only be made by the Regional or State Water Boards, and not by the municipal discharger. If a municipality reviews a lengthy menu of BMPs and chooses to select only a few of the least expensive, it is likely that MEP has not been met. On the other hand, if a municipal discharger employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit derived, it would have met the standard. Where a choice may be made between two BMPs that should provide generally comparable effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPs that would address a pollutant source, or to pick a BMP base solely on cost, which would be clearly less effective. In selecting BMPs the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with its permit. After selecting a menu of BMPs, it is the responsibility of the discharger to ensure that all BMPs are implemented."

Municipal Storm Water Conveyance System – (See Municipal Separate Storm Sewer System or MS4).

Municipal Separate Storm Sewer System (MS4) – MS4 is an acronym for Municipal Separate Storm Sewer System. A Municipal Separate Storm Sewer System is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains): (i) Owned or operated by a State, city town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designated or used for collecting of conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

Historic and current development make use of natural drainage patterns and features as conveyances for urban runoff. Urban streams used in this manner are part of the municipalities MS4 regardless of whether they are natural, man-made, or partially modified features. In these cases, the urban stream is both an MS4 and a receiving water.

National Pollution Discharge Elimination System (NPDES) – Permits issued under Section 402(p) of the Federal Clean Water Act for regulating discharge of pollutants to waters of the United States.

Non-hazardous Solid Waste - Non-hazardous solid waste means "all putrescible and

nonputrescible solid, semi-sold, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-sold wastes and other discarded solid or semi-solid waste; provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentration which exceed applicable water quality objectives or could cause degradation of wasters of the state." [CCR Title 27, Chapter 3, Subchapter 2, Article 2, Section 20220].

Non Point Source Pollution (NPS) – Non point source refers to diffuse, widespread sources of pollution. These sources may be large or small, but are generally numerous throughout a watershed. Non Point Sources include but are not limited to urban, agricultural, or industrial areas, roads, highways, construction sites, communities served by septic systems, recreational boating activities, timber harvesting, mining, livestock grazing, as well as physical changes to stream channels, and habitat degradation. NPS pollution can occur year round any time rainfall, snowmelt, irrigation, or any other source of water runs over land or through the ground, picks up pollutants from these numerous, diffuse sources and deposits them into rivers, lakes, and coastal waters or introduces them into ground water.

Non-Storm Water - Non-storm water consists of all discharges to and from a storm water conveyance system that do not originate from precipitation events (i.e., all discharges from a conveyance system other than storm water). Non-storm water includes illicit discharges, non-prohibited discharges, and NPDES permitted discharges. An illicit discharge is defined at 40 CFR 122.26(b)(2) as any discharge to a municipal storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a separate NPDES permit and discharges resulting from emergency fire fighting activities.

Nuisance - As defined in the Porter-Cologne Water Quality Control Act a nuisance is "anything which meets all of the following requirements: 1) Is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. 2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. 3) Occurs during, or as a result of, the treatment or disposal of wastes."

Numeric effluent limitations - The typical method by which effluent limits are prescribed for pollutants in waste discharge requirements implementing the federal NPDES regulations. When numeric effluent limits are met at the "end-of-pipe," the effluent discharge generally will not cause water quality standards to be exceeded in the receiving waters (i.e., water quality standards will also be met).

Person - A person is defined as an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. [40 CFR 122.2].

Point Source - Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged.

Pollution - As defined in the Porter-Cologne Water Quality Control Act, pollution is "the alteration of the quality of the waters of the State by waste, to a degree that unreasonably affects either of the following: A) The waters for beneficial uses; or 2) Facilities that serve these beneficial uses." Pollution may include contamination.

Pollutant - A pollutant is broadly defined as any agent that may cause or contribute to the degradation of water quality such that a condition of pollution or contamination is created or aggravated.

Pollution Prevention - Pollution prevention is defined as practices and processes that reduce or eliminate the generation of pollutants, in contrast to source control, treatment, or disposal.

Post-Construction BMPs - A subset of BMPs including structural and non-structural controls which detain, retain, filter, or educate to prevent the release of pollutants to surface waters during the final functional life of development.

Pre-Development Runoff Conditions - The runoff conditions that existed onsite immediately before the planned development activities occur. This definition is not intended to be interpreted as that period before any human-induced land activities occurred. This definition pertains to redevelopment as well as initial development.

Receiving Water Limitations - Waste discharge requirements issued by the SARWQCB typically include both: (1) "Effluent Limitations" (or "Discharge Limitations") that specify the technology-based or water-quality-based effluent limitations; and (2) "Receiving Water Limitations" that specify the water quality objectives in the Basin Plan as well as any other limitations necessary to attain those objectives. In summary, the "Receiving Water Limitations" provision is the provision used to implement the requirement of CWA section 301(b)(1)(C) that NPDES permits must include any more stringent limitations necessary to meet water quality standards.

Sediment - Soil, sand, and minerals washed from land into water. Sediment resulting from anthropogenic sources (i.e. human induced land disturbance activities) is considered a pollutant. This Order regulates only the discharges of sediment from anthropogenic sources and does not regulate naturally occurring sources of sediment. Sediment can destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

Storm Water - "Storm water" is as defined urban runoff and snowmelt runoff consisting only of those discharges which originate from precipitation events. Storm water is that portion of precipitation that flows across a surface to the storm drain system or receiving waters. Examples of this phenomenon include: the water that flows off a building's roof when it rains (runoff from an impervious surface); the water that flows into streams

when snow on the ground begins to melt (runoff from a semi-pervious surface); and the water that flows from a vegetated surface when rainfall is in excess of the rate at which it can infiltrate into the underlying soil (runoff from a pervious surface). When all factors are equal, runoff increases as the perviousness of a surface decreases. During precipitation events in urban areas, rain water picks up and transports pollutants through storm water conveyance systems, and ultimately to waters of the United States.

Toxicity - Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies. The water quality objectives for toxicity provided in the Water Quality Control Plan, Santa Ana River Basin, Region 8, (Basin Plan), state in part…*"All waters shall be free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life….The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge"….* Urban runoff discharges from MS4s are considered toxic when (1) the toxic effect observed in an acute toxicity test exceeds zero Toxic Units Acute (Tua=0); or (2) the toxic effect observed in a chronic toxicity test exceeds one Toxic Unit Chronic (Tuc=1). Urban runoff discharges from MS4s often contain pollutants that cause toxicity.

Total Maximum Daily Load (TMDL) - The TMDL is the maximum amount of a pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain water quality standards. Under Clean Water Act Section 303(d), TMDLs must be developed for all water bodies that do not meet water quality standards after application of technology-based controls.

Urban Runoff - Urban runoff is defined as all flows in a storm water conveyance system and consists of the following components: (1) storm water (wet weather flows) and (2) non-storm water illicit discharges (dry weather flows).

Waste - As defined in California Water Code Section 13050(d), "waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal."

Article 2 of CCR Title 23, Chapter 15 (Chapter 15) contains a waste classification system which applies to solid and semi-solid waste which cannot be discharged directly or indirectly to water of the state and which therefore must be discharged to land for treatment, storage, or disposal in accordance with Chapter 15. There are four classifications of waste (listed in order of highest to lowest threat to water quality): hazardous waste, designated waste, nonhazardous solid waste, and inert waste.

Water Quality Objective - Numerical or narrative limits on constituents or characteristics of water designated to protect designated beneficial uses of the water. [California Water Code Section 13050 (h)] California's water quality objectives are established by the State/Regional Water Boards in the Water Quality Control Plans.

As stated in the Porter-Cologne Requirements for discharge (CWC 13263): "(Waste discharge) requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241."

Numeric or narrative limits for pollutants or characteristics of water designed to protect the beneficial uses of the water. In other words, a water quality objective is the maximum concentration of a pollutant that can exist in a receiving water and still generally ensure that the beneficial uses of the receiving water remain protected (i.e., not impaired). Since water quality objectives are designed specifically to protect the beneficial uses, when the objectives are violated the beneficial uses are, by definition, no longer protected and become impaired. This is a fundamental concept under the Porter Cologne Act. Equally fundamental is Porter Cologne's definition of pollution. A condition of pollution exists when the water quality needed to support designated beneficial uses has become unreasonably affected or impaired; in other words, when the water quality objectives have been violated. These underlying definitions (regarding beneficial use protection) are the reason why all waste discharge requirements implementing the federal NPDES regulations require compliance with water quality objectives. (Water quality objectives are also called water quality criteria in the Clean Water Act.)

Water Quality Standards - are defined as the beneficial uses (e.g., swimming, fishing, municipal drinking water supply, etc.,) of water and the water quality objectives necessary to protect those uses.

Waters of the State - Any water, surface or underground, including saline waters within the boundaries of the State [California Water Code Section 13050 (e)]. The definition of the Waters of the State is broader than that for the Waters of the United States in that all water in the State is considered to be a Waters of the State regardless of circumstances or condition. Under this definition, a Municipal Separate Storm Sewer System (MS4) is always considered to be a Waters of the State.

Waters of the United States - Waters of the United States can be broadly defined as navigable surface waters and all tributary surface waters to navigable surface waters. Groundwater is not considered to be a Waters of the United States.

As defined in 40 CFR 122.2, the Waters of the U.S. are defined as: **"(a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;** (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3)

Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition**: (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;** (f) The territorial seas; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA."

Watershed - That geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers (also known as drainage area, catchment, or river basin).

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SANTA ANA REGION

MONITORING AND REPORTING PROGRAM NO. 01-16

NPDES NO. CAS618036

FOR

THE SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT, THE COUNTY OF SAN BERNARDINO, AND THE INCORPORATED CITIES OF SAN BERNARDINO COUNTY WITHIN THE SANTA ANA REGION

AREA-WIDE URBAN STORM WATER RUNOFF

I. GENERAL

1. Revisions of the monitoring and reporting program may be necessary to ensure that the discharger is in compliance with requirements and provisions contained in this order. Revisions may be made by the Executive Officer at any time during the term of this order, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, number of sampling locations, or the number of samples collected.
2. All sample collection, handling, storage, and analyses shall be in accordance with 40 CFR Part 136.
3. The permittees are authorized to complement monitoring data from other sources provided those sources are identical to sources in the Santa Ana Watershed.
4. The Executive Officer is authorized to allow the permittees to participate in statewide, national, or other monitoring programs in lieu of this monitoring program.
5. The permittees shall develop and submit a consolidated monitoring program for approval by the Executive Officer of the Regional Board. The consolidated program for water quality monitoring should be capable of attaining the objectives mentioned below.

II. OBJECTIVES

The overall goal of this monitoring program is to develop and support an effective watershed management program. The following are the major objectives of this monitoring program:

1. To define water quality status, trends, and pollutants of concern associated with urban storm water discharges and their impact on the beneficial uses of the receiving waters.
2. To identify the sources of pollutants in storm water runoff to the maximum extent possible.
3. To characterize pollutants and to assess the influence of land use on water quality.
4. To identify significant water quality problems related to storm water discharges within the watershed.

5. To evaluate the effectiveness of existing management programs, including an estimate of pollutant reductions achieved by the structural and nonstructural BMPs.
6. To identify other sources of pollutants in storm water runoff to the extent possible (e.g., atmospheric deposition, contaminated sediments, other non-point sources, etc.).
7. To conduct monitoring in cooperation with Riverside County for investigation of Bacteriological Impairments in the upper Santa Ana River.
8. To verify and to control illegal discharges.
9. To identify those waters which without additional action to control pollution from storm water discharges cannot reasonably be expected to attain or maintain applicable water quality standards or the goals and requirements of the Basin Plan.
10. To evaluate costs and benefits to the stakeholder including the public.

The permittees have been monitoring storm water and receiving waters since the first permit term. It is recognized that some of these objectives may not have been attainable during the previous permit terms. It is hoped that continuous monitoring for long term shall help to accomplish these objectives. The Regional Board authorizes the Executive Officer to evaluate and determine adequate progress toward meeting each objective.

This order references three components of the monitoring program: (1) The existing monitoring program; this monitoring program shall continue to be implemented until the integrated watershed monitoring program is approved; (2) An integrated watershed monitoring program is to be developed under this order to identify data gaps and to attain the above-mentioned objectives; and (3) Other regional monitoring efforts where the permittees participate or make monetary contributions.

III. MONITORING PROGRAM REQUIREMENTS

By July 1, 2003, the permittees shall complete the GIS-based mapping of drainage area information, including drainage system facilities, land uses, and receiving waters. By December 1, 2003, the permittees shall complete an assessment of the relative pollutant loading from different drainage areas to the receiving waters. This information shall be reported in the annual reports starting in 2004.

By December 1, 2003, the permittees shall evaluate the effectiveness of selected BMPs in controlling pollutant loads in urban storm water runoff. The results shall be included in the annual reports starting from 2004.

1. By July 1, 2002, the Principal Permittee, in collaboration with the co-permittees, shall develop and submit for approval of the Executive Officer a bacteriological monitoring program to determine the sources of bacteriological contamination in the Santa Ana River. This program shall include wet and dry weather monitoring

in the River and its major tributaries within the permittees' jurisdiction.

2. By July 1, 2002, the permittees shall revise and submit for approval of the Executive Officer an integrated watershed monitoring program geared towards achieving the above stated objectives and additional objectives that the Executive Officer may deem appropriate. In developing this program, the principal permittee is encouraged to seek cooperation with the permittees from the Riverside and Orange Counties. The Executive Officer or his/her designated representative(s) shall facilitate the coordination meetings or subcommittees formed to achieve this goal. The development and implementation of the monitoring program shall be in accordance with the time schedules prescribed by the Executive Officer. At a minimum, the program shall include the following:

   a) Uniform guidelines for quality control, quality assurance, data collection and data analyses.

   b) A mechanism for the collection, analyses and interpretation of existing data from San Bernardino County monitoring programs and other similar programs. These and other data from local, regional or national sources should be utilized to characterize different storm water sources; to determine pollutant generation, transport and fate; to develop a relationship between land use, development size, storm size and the event mean concentration of pollutants; to determine spatial and temporal variances in storm water quality and seasonal and other bias in the collected data; and to identify any unique features of the Santa Ana Watershed. The permittees are encouraged to use data from similar studies, if available.

   c) A description of the monitoring program including:

      i. The number of monitoring stations;

      ii. Environmental indicators (e. g., ecosystem, biological, habitat, chemical, sediment, stream health, etc.) chosen for monitoring;

      iii. Parameters selected for field screening and for laboratory work; and

      iv. Total number of samples to be collected from each station, receiving water and major outfall monitoring, frequency of sampling during wet and dry weather, short duration or long duration storm events, type of samples (grab, 24-hour composite, etc.), and the type of sampling equipment.

   d) A mechanism for analyzing the collected data and interpreting the results including:

      I. An evaluation of the effectiveness of the best management practices, and need for any refinement of the management practices;

II. An evaluation of water quality status, trends, and pollutants of concern associated with urban storm water discharges and their impact on the beneficial uses of the receiving waters;

III. Characterization and identification of sources of pollutants in storm water runoff and an assessment of the influence of land use on water quality;

IV. Identification of significant water quality problems related to storm water discharges within the watershed;

V. Evaluation of the effectiveness of existing management programs, including an estimate of pollutant reductions achieved by the structural and nonstructural BMPs;

VI. Evaluation of sources of bacteriological contamination in the upper Santa Ana River in coordination with Riverside County;

VII. Identification of those waters which without additional action to control pollution from storm water discharges cannot reasonably be expected to attain or maintain applicable water quality standards specified in the Basin Plan; and

VIII. Analysis and interpretation of the collected data to determine the impact of storm water runoff and/or validate any water quality models.

3. Pending approval of the integrated watershed monitoring program, the permittees shall continue existing wet weather monitoring at storm drain monitoring Sites 2, 3, and 5, as identified in the approved monitoring program amended on January 24, 2001. The permitees shall focus on source identification and source control efforts based on the results of these and other monitoring efforts.

IV. REPORTING

1. All progress reports and proposed strategies and plans required by this order shall be signed by the principal permittee and copies shall be submitted to the Executive Officer of the Regional Board under penalty of perjury.

2. The permittees shall submit an ANNUAL PROGRESS REPORT to the Executive Officer of the Regional Board and to the Regional Administrator of U.S. EPA, Region 9, no later than November 15 of each year. This progress report may be submitted in a mutually agreed upon electronic format. At a minimum, the annual progress report shall include the following:

   a) A review of the status of program implementation and compliance (or non-compliance) with the schedules contained in this order.

   b) An assessment of the effectiveness of control measures established

under the illicit discharge elimination program and the ROWD. The effectiveness may be measured in terms of how successful the program has been in eliminating illicit/illegal discharges and in reducing pollutant loads in storm water discharges.

c) An assessment of any storm water management program modifications made to comply with Clean Water Act requirements to reduce the discharge of pollutants to the maximum extent practicable.

d) An analysis and discussion of the monitoring results and any impacts on the receiving waters. Also, recommendations for corrective actions during the upcoming year of management program implementation and monitoring.

e) An analysis of the effectiveness of the overall storm water management program and identification of proposed programs which will result in the attainment of the water quality standards, and a time schedule to implement the new programs.

f) An assessment of the public education program (including industrial facilities and construction sites) and educational activities proposed for the upcoming year.

g) A progress report on the prosecution of illegal dischargers and reduction or elimination of illegal discharges.

3. Permittees shall be responsible for the submittal of all required information and materials needed to comply with this order in a timely manner to the principal permittee. All such submittals shall be signed by a duly authorized representative of the permittee under penalty of perjury.

V. REPORTING SCHEDULE

All reports required by this order shall be submitted to the Executive Officer of the Regional Board in accordance with the following schedule:

Reporting Schedule (Order 01-16)		
ITEM	**COMPLETION DATE/FREQ.**	**REPORT DUE DATE**
II. Evaluate ordinances to determine authority to impose administrative fines for storm water violations	July 1, 2002	Nov. 15, 2002
IV. RECEIVING WATER LIMITATIONS: Pollutant source investigation and control plan to prevent or reduce pollutants from MS4 systems causing or contributing to exceedance of water quality standards	As needed	Nov. 15
V. IMPLEMENTATION AGREEMENT: Evaluate storm water management structure and implementation agreement	Annually	Nov. 15
VI. LEGAL AUTHORITY/ ENFORCEMENT: Review ordinances establishing legal authority to determine effectiveness in prohibiting different types of discharges	One Time	July 1, 2003
The Principal Permittee or subcommittee shall develop a restaurant inspection program	November 15, 2002	November 15, 2002
Submit a statement signed by legal counsel that permittee has obtained all necessary authority to comply with this Order through adoption of ordinances and/or municipal code modifications	One Time	Nov. 15, 2003
VII. ILLEGAL/ILLICIT CONNECTIONS; LITTER, DEBRIS AND TRASH CONTROL: Spills , leaks, and/or illegal dumping (with immediate threat to human health or environment) shall be promptly investigated and reported	Ongoing	Within 24 hours by phone or e-mail, written within 5 days
All sewage spills above 1,000 gallons and all reportable quantities of hazardous waste spills	Ongoing	Within 24 hours
All other spill incidents	Annually	Nov. 15
Identify control measures implemented to reduce and/or eliminate the discharge of trash and debris	Annually	Nov. 15

Review litter/trash control ordinances to determine need for revision	July 1, 2003	Nov.15, 2003
Determine need for additional debris control measures	July 1, 2003	Nov.15, 2003
VIII. MUNICIPAL INSPECTIONS OF CONSTRUCTION SITES: Develop an inventory of all construction sites	Nov. 15, 2002 & updated by Sept. 30 annually thereafter	Nov. 15
IX. MUNICIPAL INSPECTIONS OF INDUSTRIAL FACILITIES: Develop an inventory of industrial facilities with business permits or other authorization that have potential of discharging pollutants to the MS4	July 1, 2003 & updated annually	Nov. 15
Identify the remaining industrial facilities that do not have business permits or other authorization	July 1, 2001 & updated annually	Nov. 15
X. MUNICIPAL INSPECTIONS OF COMMERCIAL FACILITIES: Develop an inventory of listed commercial facilities that have potential of discharging pollutants to the MS4	July 1, 2003 & updated annually	Nov. 15
XI. SEWAGE SPILLS, INFILTRATION INTO MS4 SYSTEMS FROM LEAKING SANITARY SEWER LINES, ANS SEPTIC SYSTEM FAILURES: Propose a mechanism to determine and control impact of infiltration from leaking sanitary sewer system on storm water quality	One Time	July 1, 2003
Propose a mechanism to determine the effect of septic system failure on storm water quality	One Time	July 1, 2003
Propose a unified response mechanism to respond to any sewage spills	One Time	July 1, 2003
Review current oversight programs for portable toilets to determine the need for any revision	One Time	July 1, 2003
XII. NEW DEVELOPMENT (INCLUDING SIGNIFICANT RE-DEVELOPMENT): Establish a mechanism to ensure all construction projects and industrial sites filed NOI for coverage under the General Permit prior to issuance of local permits or approvals	One Time	July 1, 2002

Review and modify approval/permitting process to incorporate BMPs in the Guidelines for New Development and Redevelopment	One Time	July 1, 2002
Review planning procedure and CEQA document preparation process to ensure storm water-related issues are properly considered and addressed	Within 120 days of issuance of this Order	
Incorporate watershed protection principles and policies into the General Plan	July 1, 2004	Nov. 15, 2004
Review current grading/erosion control ordinances	One Time	July 1, 2002
Identify a new development site and propose study to evaluate the effectiveness of a selected BMP	One Time	Nov. 15, 2003
Review Guidelines for New Development and Redevelopment to determine the need for any revisions	Within six months of adoption of this Order	
XII. WATER QUALITY MANAGEMENT PLAN (WQMP) FOR RUNOFF (FOR NEW DEVELOPMENT/SIGNIFICANT RE-DEVELOMENT): Review existing BMPs for new development to determine the need for developing any additional WQMPs for urban runoff from new developments/significant redevelopments	One Time	July 1, 2003
XIII. PUBLIC EDUCATION AND OUTREACH: Public awareness survey to determine effectiveness of current public and business education strategy	One Time	July 1, 2002
Recommend any changes to the public and business education program	One Time	Dec. 1, 2002
Develop public education material to encourage the public to report illegal dumping from residential, industrial, construction, and commercial sites into public streets, storm drains and other waterbodies	One Time	Within six months of adoption of this Order
Develop BMP guidance for household use of fertilizer, pesticides, herbicides, and other chemicals, guidance for mobile vehicle maintenance, carpet cleaners, commercial landscape maintenance, and pavement cutting	One Time	July 1, 2003
Establish mechanism to ensure that all construction	One Time	July 1, 2002

projects five acres and over and all industrial sites (requiring coverage) have appropriate General Storm Water Permit coverage		
Establish a mechanism to ensure that local permits for all proposed construction and industrial facilities are conditioned upon proof of obtaining coverage under the State's General Permit	One Time	July 1, 2002
XIV. MUNICIPAL FACILITIES/ACTIVITIES: Complete assessment of flood control facilities to evaluate opportunities to configure and/or reconfigure channel segments to function as pollution control devices and optimize beneficial uses	July 1, 2003	Nov. 15, 2003
Develop and distribute to all permittees a BMP fact sheet to address public agency activities	July 1, 2002	Nov. 15, 2002
Develop and distribute BMP guidance for public agency, contract field operations and maintenance staff to provide guidance in appropriate pollution control measures, how to respond to spills, etc.	July 1, 2002	Nov. 15, 2002
Evaluation of efficiency and cost effectiveness of the available BMPs for litter control and develop recommendations for any needed improvements	July 1, 2003	Nov. 15, 2003
Identify areas not subject to street sweeping due to lack of continuous curb and gutter and evaluate their potential for impacting storm water quality	One Time	Nov. 15, 2003
Inspect and maintain at least 80% of drainage facilities on an annual basis, with 100% of facilities in a two-year period Evaluate if inspection and maintenance schedule need to be increased.	Annually	Nov. 15
XVI. PROGRAM MANAGEMENT: Evaluate the management plan to determine need for revisions	By October 1, Annually	Nov. 15
XVII. FISCAL RESOURCES: Prepare and submit a unified fiscal analysis to the EO	Annually	Nov. 15
XIX. PERMIT EXPIRATION AND RENEWAL: Report of Waste Discharge	180 days prior to expiration	August 7, 2006
MONITORING PROGRAM REQUIREMENTS: GIS-based mapping of drainage area information	One Time	July 1, 2003
Assessment of relative pollutant loading from different drainage areas to receiving waters	Dec. 1, 2003, One Time	Nov. 15, 2004

Evaluate effectiveness of selected BMPs in controlling pollutant loads	Dec. 1, 2003, Annually thereafter	Nov. 15, 2004
Integrated monitoring program, including bacteriological monitoring program	One Time	July 1, 2002
REPORTING: Annual progress report	Annually	Nov. 15

Ordered by_____

Gerard J. Thibeault

Executive Officer

Date……..